1: Parsons E-5 (1923-1927) 1929
NT18 Tewa NT18

PREFACE

Of all the more visited Pueblo peoples the Tewa have been 114 ●
the least systematically described. They have been visited by
several anthropologists, notably by J. P. Harrington, M. C.
Stevenson, H. J. Spinden, and B. Freire-Marreco. With the exception
of *The Ethnogeography of the Tewa Indians* by Harrington,
The Ethnobotany of the Tewa Indians by Robbins, Harrington,
and Freire-Marreco, and *The Ethnozoology of the Tewa
Indians*, by Henderson and Harrington, and studies of kinship
terms by Harrington and Freire-Marreco, all monographs on
highly specialized subjects, no records of investigation have
been published. As no publication was in prospect and no 121
material available even in manuscript, and as we had reached
a point in our general survey of the social organization of the
Pueblo Indians where more knowledge of the Tewa was indispensable
for coordination and interpretation, I undertook in
November, 1923, the unwelcome task of duplicating research
among a people who are past masters in the art of defeating
inquiry.

Imitating the secretiveness observed in all the Río Grande [23
pueblos, I settled in Alcalde, the Mexican town two or three
miles north of San Juan, and, here, thanks to my helpful and
understanding hosts of San Gabriel ranch, I secured informants
from San Juan, Santa Clara, and San Ildefonso. My informants [124]
worked singly or in couples, niece and uncle, sister and
brother, mother and daughter, one interpreting for the other.
The San Juan informants were by far the best, being intelligent 115
and scrupulous,—the man the most accomplished teller of folktales
I have met in any pueblo. Not merely was his memory
excellent, but he was an artist, a great artist, with feeling for
values, humorous and dramatic, yet using with fidelity as well
as with resourcefulness the patterns of his narrative art and of

423 his deceased wife (house 26), which she got from her father,
428 whose house is contiguous. In other words, this house did not
[592] revert to the deceased woman's family, although it was originally a part of their house, and the woman died without children.

● [114] In the foregoing analysis no information about San Ildefonso was included because the information obtained was too unreliable for such close analysis. The San Ildefonso information can be taken only as descriptive comment. As such it corre-
[194] sponds with one exception to the data for the northern towns. Houses are inherited from either parent, from grandparent or from spouse, or a house is, so to speak, a wedding present. But female proprietorship appears to equal male proprietorship. According to List A there are fourteen female owners to eleven male; according to List B, seven female owners to nine male. This increased tendency in favor of female ownership may have been influenced by Keresan practice.

LISTS OF HOUSEHOLDS[107]

San Juan

592 1. Little kiva. (See pl. 2*a*).
423 2. Vacant. Owner, F., Winter.[108] See house 24.
425 3. Owner, F., Summer (Gen. I, 26). With her and her husband live her widowed brother and his daughter (Gen. I, 24, 59). She got the house from her mother (Gen. I, 5), who had got it from her father (Gen. I, 2).
4. Owner, M., Winter (Gen. I, 9). With wife, unmarried children and one grandson (Gen. I, 73). He got the house from his father. Houses 3 and 4 had been one house divided between a daughter and son.
5. Owner, M., T'anyo (Sun cactus) or José Antonio Kasia [Garcia], Winter. He is *tsih pu'fona sen^{4}o.* (See p. 118) He is a widower, aged [75], and lives here with an unmarried son, Poyų, Felipe Kasia, aged [23].
6. Owner, M., Katsaę (White leaf), aged [28], Winter, son of owner of house 5. The house was bought by the owner from a Mexican. The house is sometimes lived in, sometimes used as store house. See house 10. Katsaę is not a *pu'fona*.

---

[107] See house maps, 2-7.

[108] For the moieties, Winter and Summer people, see pp. 89ff. Clan affiliations are little known. See p. 82ff.

592 423 425 62. Owner, M., Summer. With wife, a Summer woman from San Juan, and six children. He is brother to owners of houses 58, 60, 61. He built the house on land given him by his mother.

63. Owner, M., Winter. With Mexican wife and seven children. He bought the house.

64. Owner, M., Winter. With wife and four children (Gen. III, 60, 61, 89, 91-3).

65. Vacant. Owner, M., Winter. He is married to a white woman, in Albuquerque. He is brother to the owner of house 63. He built this house.

66. Owner, M., Summer. With wife, an Osage, and two orphaned grandchildren and a boy given to him from Pojoaque, half Mexican.

67. Vacant. Owner, M., Winter. Married to a Navaho. He built this house.

San Ildefonso[114]

114 115 124 The following data in list A are in large part unreliable. My informant would not take the trouble to recall the membership of the several households nor the exact relationships of the persons he did mention. For example, when I remarked at the conclusion of the list-making that no old women, no *saiya* or grandmothers, were included, "We have no *saiya*," said he, "they have all died off," a form of prevarication usual in reference to sacerdotalists whose existence is to be concealed, but more open to challenge in the case of old women, as was evident when the *saiya* in my man's own family was encountered in town. This was Tsehta, whom he had mentioned in another connection, but not in the house list. The distribution of houses according to moiety is probably reliable in outline, it corresponds in general to the distribution given by another informant. The references to clanship affiliations are entirely unreliable. In all cases but one (house 3), husband and wife are said to belong to the same clan.[115] I incline to think that my informant knew few if any of the clan affiliations of his neighbors and fabricated at pleasure. 114 614 124 As fabrication, however, the clan affiliations he gives are of interest, for fabrication itself shows social pattern. For example he specifies only four clans,

---

[114] See pl. 10.

[115] But see p. 83.

Sun, Red stone, Grass, Turquoise, in contrast to the longer list 114
of clans he gives in another connection; and the smaller number 614
exemplified in the house list is probably more accurate. With 124
the exception of Turquoise his house list clan enumeration is corroborated by the woman who was the source of information for list B. As for the references to Turquoise clan, I incline to think that the moiety only was being referred to. My informant was one impossible to pin down on such an ambiguity.

102
126
261

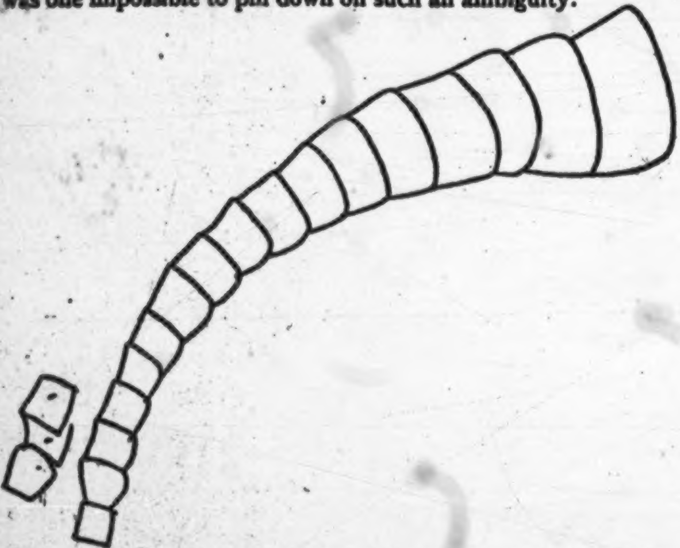


Fig. 1. First draft of map of houses. Made by a San Ildefonso townswoman.

When his house list is compared with the second house 114
list of San Ildefonso, one is tempted to think that the whole of 124
it is fabrication. Only two households can be identified in the two lists, house 15 (List A), with house 3 (List B), and house 22 (List A) with house 14 (List B), and the details even in these cases do not correspond.[117] Differences in the personal names

---

[117] In the first case we have very definite evidence of the untrustworthiness of the informant of List A since informant of List B was the inmate of house 3, list B. [115]

114 of the two lists are in part explicable by the fact that the same 124 person may have two or more names; but for the almost complete divergency in the names one must look for further explanation, I incline to think, in the inventiveness of the giver of (115) List A. The giver of List B was excessively timid, but not inventive; and her list is the less unreliable. She had difficulty, however, in visualizing houses in mapping, as her first attempt at map making (fig. 1) indicates.

List A

592 1. *Pole'e*, Squash kiva, belonging to Summer people. (See pl. 9*b*.)
423 425 2. Owner, M., Agoyopin (Star mountain) or Santiago Alarides, Summer, Sun. Widower. He was mentioned by Benina of Nambé as the most influential man in San Ildefonso.
3. *Pendi te'e*, Outside kiva, belonging to Winter people. (See pl. 11*a*.)
4. Owner, M., Kenyo (Mountain-lion), Summer, Grass. Aged widower, *Tewa pufona seno*, with aged daughter who never married, Summer, Grass.
5. Owner, F., Voyo, Summer, Sun. With husband, Kudo, Summer, Sun, and one son.
5a. Inserted as an afterthought as the house of Summer chief.
6. Owner, F., Hutse (Yellow cedar), Summer, Grass. With husband, Tanyitsire (Parrot bird), Summer, Grass; two daughters, two sons.
7. Owner, M., Kaw'ewi (Leaf kick-stick), Summer, Sun. With wife, G'uhpitsąwe, Red stone zigzag, Summer, Sun.
8. Owner, F., Katsire (Leaf bird), Winter, Turquoise. With husband, Pimpeta (Painted mountain prayer-stick), Winter, Turquoise.
9. Owner, M., Tsekǫ, Winter, Turquoise. Widower. He got the house from his deceased wife.
10. Owner, F., Okuwasąwe (Cloud zigzag), Winter, Red stone. With husband, Pota (Painted squash), Winter, Red stone, and two children. Pota is *samatyo*.[118] Okuwasąwe got the house from her mother.
11. Owner, F., Eyią (Abalone shell), Winter, Red stone. With husband, Tanyisąwe (Parrot zigzag), Winter, Red stone, and three children.
12. Owner, F., Tetsetse, Winter, Turquoise. With husband, Kwió (Ditch) Winter, Turquoise, and five children.
13. Owner, M., Ta'e, Winter, Red stone. With wife, Tutsauwe, Blue basket, Winter, Red stone, and five children.
13a. Inserted as an afterthought as the house of the informant. This house was probably fabricated to conceal the fact that the informant lived in no. 14a or 14b.

---

[118] See p. 135.

1: Parsons E-5 (1923-1927) 1929
NT18 Tewa NT18

KINSHIP

Tewa kinship terms have been studied carefully by Harrington 114 and by Freire-Marreco, and were it not for the cognate subject of clanship the data would call for no review or amplification. But clanship among the Tewa has been considered but slightly and, at that, misleadingly. Investigators have been satisfied to give merely lists of clans, unchecked by personal applications, and to assert lines of descent on secondhand evidence. But even at first hand the evidence is conflicting; in the minds of informants clanship is uncertain and negligible. Unaided by intensive study of kinship by the genealogical 114 method, the subject of Tewa clanship was bound to 121 remain obscure and perplexing. The following kinship data are presented therefore primarily as a basis for determination of clanship.

For ease of reference repetition in part of data already published 171 is unavoidable and to the student of variation in kinship 184 nomenclature, not amiss. Kinship nomenclature is variable 601 among the Pueblos, not only from town to town speaking the same language, but within the same town. Family usage varies.

LIST OF KINSHIP TERMS 601

ᵈyiya—(S. J.) mother
jiya—(S. C.)
djiya—(S. I.)
tara, ta—(S. J., S. I.) father
tará—(S. C.)
saiya—grandmother (S. J., N., father's mother)
saiyá—great-grandmother (S. C.)
jiya (*yiya, ia*) *kwiyo*—grandmother (S. C., S. I., N., mother's mother)
t'et'e—grandfather (S. J., N., father's father), great grandfather (S. C.)
tdsendo—grandfather (S. C., N., mother's father)
papasaiya—great-grandmother (S. J.)
papat'et'e—great-grandfather (S. J.)
kaiyé—mother's older sister (S. J.)
ka'ye—mother's older sister (S. C.)
ko'o—mother's younger sister (S. J.); mother's sister (N.)
ko'o'—mother's younger sister (S. C.)

CLANSHIP

171 614 Among the Tanoans at Taos, Picuris, and Isleta, there is no clan system; at the other limit of the Pueblo area, among the Hopi, clanship is highly developed. The clan system of Zuñi approximates the Hopi; the systems of the Keresan towns vary somewhat with their distribution west and east, the western Keres having a more pronounced system than the eastern Keres.[154] At Jemez clanship is fairly insignificant. Among the 614 Tewa, clanship is still more insignificant, functioning not even as an exogamous institution, and, as far as I could learn, devoid of ceremonial associations. It is merely a question of a name, which, to the younger people at least, may be even unknown. Even to the older people of San Juan and Santa Clara the clan affiliations of women or men marrying into the family are for the most part unknown, let alone the clan affiliations of neighbors. A middle-aged San Juan woman did not know what clan she belonged to. She would have to ask her maternal uncle, she said, and she was under the impression that at marriage a woman joined her husband's clan, just as she joined his moiety.[155] A middle-aged Santa Clara man thought his Tesuque[156] wife was a Sun clanswoman, he was not sure. How far ignorance or indifference[157] in the matter of clan classification may go comes out plainly in the analysis of our genealogical tables. In few cases, if any, is the clan of an unrelated person known.

---

[114] [154] Mrs. Goldfrank refers to the "degeneration" of clanship at Cochiti. (Goldfrank, *1*, 8). In view of the Tewa data, I incline to the opinion that clanship at Cochiti did not develop. It remained a marginal trait.

[155] I have since heard definitely that this may happen,—a certain Mountain eagle, Winter woman on marriage became a *punia*, Summer woman.

[156] There are *okuwa t'ewa*, Cloud people (clan) at Tesuque, he said. A Tesuque informant referred to the clans there as *okuwa*, *kunyę* (Turquoise), *po* (Squash), *t'an* (Sun), *ye* (Weasel), and *g'ukpi* (Red stone). He himself was Red stone, his wife, Weasel; their children, Red stone, i.e., the paternal descent prevails.

[157] My Santa Clara acquaintances had friends at San Juan, they said, and visited them, but of San Juan clans they did not know anything. "We never talk about *t'owa*."

But there is still another reason, I suspect, for the multiplicity of clan names at Nambé and perhaps wherever the clan is nothing but a name. Informants are peculiarly unreliable in advancing a name when they do not really know the clan name of the person enquired about. Several times Benina of Nambé contradicted herself in the matter of clan names. Somebody was Red stone today, who had been Squash yesterday and might be Moon tomorrow. Her Moon clan affiliations were actually so contradictory that I have not included that clan name in my list at all. For the same reason I did not include the citation of a Basket clan. 114 614 621 [115]

Nor is Nambé a criterion for the question of reckoning descent. Mexican influence is a strong factor for reckoning descent through the father and Mexican traits are more prominent in Nambé than in any other pueblo I know. The first husband of our Nambé informant was half Mexican, half Navaho, and I suspect that she also had Mexican blood. In her mind descent was indubitably paternal—in spite of the exceptions which cropped out in her own descriptions. For example, her first husband and his mother were Winter people, whereas his father and his brothers were Summer people. Again one descendant of this family was described as a Coyote clansman, whereas his paternal uncles were Sand clansmen. It happens that our Nambé informant had been one of the chief interpreters of certain anthropologists who were some time ago in the field and who never questioned that Tewa clans were patrilineal. 114 [177] 611 621 115

LIST OF CLANS

Specifically[183] *represented*, 1923	*Not specifically represented*, 1923	*Recorded in* 1895[184]

614

---

[183] That is in genealogical tables or through citation otherwise of a specified person. Without such particularization informants in any town, especially in towns where clanship is feeble, are prone to supply fantastic lists of clans.

[184] Hodge, pl. 7.

575 Nambé *kossa*, of whom there are six.[356] The *oke kossa* are
[302] painted white and black, they visit San Juan to take part in
[575] the Basket dance. The Nambé *kossa* are painted white and
yellow. Two of them will visit Nambé during Summer dances there. Initiation into the group is performed at Nambé. Their "lake" or spring is *kate pokwinge*, east of Nambé.

Recruiting in both Santa Clara societies is through dedication either before birth or in sickness.[357]

The *oke kossa* are an innovation, Peru (Pedro) Cahete (Gen. III, 3) is the first man to hold the office of *oke kossa sen^{d}o*. Pedro Cahete is away a great deal. He goes to dance for pay at Manitou, Colorado, and "he is very rich." Tąpi (Sun comes out) or Pomenio Sisnero is the *Nambé kossa sen^{d}o*. His "right" is Genealogy III, 36 who was "given to them" before birth. He got a name from the *kossa*, but it has not been used and it is said to be forgotten.

San Ildefonso

Twenty-five years or more ago the last two *kwi'rano* died.
Nowadays six *kwi'rano*[358] from Tesuque may come to San
[115] Ildefonso to play..... So much for my lying informant. In
[114] 1927 I learned that there are two *kwirano* in San Ildefonso—
Wąpi (Tail red or Hawk) or Placido Sanchez (list B, house 2) who is *kwirano sendo*, and Kuwiye (Squirrel) or Juan Martinez.

There are three male *kossa*, *kossa sen^{d}o*, who is also the Winter chief (pl. 26) and his right and left, and two female *kossa*.

Tesuque

[114] Although my Tesuque informant said there was but one *kwirano*, from Nambé I learn that there are eight—four men and four women. Their chief lives, however, at Cochiti, where their lake is.

---

[356] Six men and three women, according to a Nambé informant.

[357] Cf. Dumarest, 191.

[358] But see below.

1: Parsons E-5 (1923-1927) 1929
NT18 Tewa NT18

CEREMONIAL CALENDAR

San Juan

X796

Early November[1] (Nov. 10-11, 1923)	Ceremony of seasonal transfer, *payoko ieme*, Summer chief gives the people to Winter chief.
After transfer ceremony (Dec. 10, 1924)	"Winter cloud people come" (kachina dance).
December (sporadic)	Adoption ceremony of Winter people.
Dec. 24, 1927	*Matachina*. Parade of Saint; Luminarios. (See p. 222.) Night visiting from house to house by Turtle dancers.
Dec. 25, 1927	*Matachina*. *Okusha(re)* (Turtle dance). Domiciliary night visiting by one set of Turtle dancers, and one set of Navaho dancers (*Wensabe share*), three male Navaho, two female.
Dec. 26, 1927	*Okusha*. Domiciliary night visiting by two *tembe share* (Bow or Hoop dancers) and by one *yuta share* dancer with a choir of three.
New Year (Tewa, *payotsambe*, year new; Mex., *maneiri*)	Early in the morning little boys go from house to house, receiving presents of bread. Appointment of secular officers and installation in house of outgoing governor.
January 6, *Santo reis* (Kings' day)	Early in the morning little boys go from house to house, receiving presents of bread. At officers' houses the boys call out, *nabi santo rei*, my holy king.
	Buffalo dance (*k'oshare*). The two men, not the girl, with a choir of from four to five men, visit houses of new governor and of his two *tenienti*, of the Outside chiefs and of the fiscals, to dance outside and receive bread (*santo rei owe"koyonemá*, holy king, visit from house to house).

805
[117]

[1] *Hqwęgepo*, "all is gathered in moon." Harrington, *2*, 66. See *ibid*, 63-66 for names of months. From Nambé I got a slightly different list of terms: January, *oyipo*, ice moon; February, *oyiwęripo*, ice break month; March, *kosindetritsupo*, lizard navel moon; April, *kųkapo*, corn leaf moon; May, *kahpipo*, leaf opening moon; June, *kahpipowipo*, leaf opening flower moon; July, *kqisapo*, everything cutting moon; August, *hęrepo*, everything fruit moon; September, *pewepo*, coming ripe moon; October, *poyepo*, hair meat moon; November, *hqwengepo*, everything gather moon; December, *nųpahpo*, under, fire moon.

black and white with corn husk tassels at the peaks. These [292] 535x
caps would be passed around in taking up a collection. In 796x
the morning each *kossa* had on a necklace of oranges and [301]
cakes, which a First Mesa visitor referred to as his lunch, 536
and carried on his back what looked like a bundle of wheat straw.

In the first published account of the Turtle dance Mc- [114]
Ilvaine Parsons describes part of the morning play of the 522
kossa as follows: "Someone let loose a rooster, which began 536
to run, squawking, around the plaza. Immediately, the three 796x
clowns rushed pell-mell after it, stumbling over themselves and everything that was in their way. Their actions fairly split the sides of every watcher. One clown made a headlong dive for the rooster, but landed with only a few tail feathers in his hands. Another made a terrific lunge and captured all that was left of what had been a rooster, and, later the clowns cooked and ate him . . . ."[364]

In the Catholic burlesque of the afternoon each *kossa* 177 [292]
donned a red paper cap and vestment of shabby cloth, to one 522
of which a cross of red cloth was appliquéed, and carried a 536
cloth over his right arm. First the "acolyte," standing very 796x
erect, brought out from some house a wooden cross, which the "priest," the senior *kossa*, kissed. Then an American trade journal was produced and held by the other "acolyte" for the priest to read from. As he read he turned the pages, all in a very droll imitation of the ecclesiastical manner. Priest and acolytes knelt in prayer. A white porcelain bowl was brought out, this was holy water, and a broom was used to asperge with. Then there was incensing from coals on a board. Meanwhile two visitors, Indians from some other pueblo, had been made to sit in chairs as congregation, and now from this
congregation a collection was taken up, the "priest" count- 522
ing from one to five in Spanish for each coin received. A large 536
796x

---

[364] Ibid.

and West, not the Tanoan moccasin boot. Their hair was flowing with a large downy feather in the forelock and bits of down stuck over the flowing hair. On their cheeks were solid circles of red paint. 535 × 796 × [302]

San Ildefonso

Ye're' share is danced by men and women, in line, outside. Outside kiva is used. Performed "when they want to." *Ye're'* was danced the last time in October.

Ti'di share (shield dance)

San Ildefonso

This is referred to as a woman's dance. There is a ring of women "dressed as men," with bow and arrow. One man dances. A summer time dance. [292]

Tesuque

Ti'i share is danced by men.

San Ildefonso

Owq' share.—A women's summer time dance, in which the women burlesque the men who talk back. [522] 535 ×

Burlesque by women at San Ildefonso, March 8-9 1926.[illegible]—March 8. Women dancers only. They dressed as men and danced like men. Choir of men, led by Ignacio (? Summer Man) who acted in general as dance director. 536 796 ×

The last half of the last dance was performed in front of one of the kivas. The men sat together in a group and talked at the dancers who enjoyed it, excepting some of the younger ones who seemed very disconcerted, a real comedy.

[illegible] Notes by Lila Law. Mrs. Law calls this Basket dance; but it corresponds to the accounts not of various Basket dances but of the *ti'di* or the *owq* dance. It is tempting to surmise that there is some women's organization back of this women's dance, which suggests the burlesqueing by women in the Mamzrau organization of the Hopi. [114] ● [171]

Santa Clara

x 535 *Willow behind dance, yan pangeshare.*—(December 25, 1927.)
x 796 After the Eagle dance, from the same house as that used by those dancers, house 47, came out the Rainbow dancers, as they were named to a white—three men alternating with three women, with a choir of five drummers and singers and behind them, wearing the Plains Indian war bonnet, four old men and two little boys. Each male dancer carried a bow-shaped willow stick, unpainted and spaced with pendant eagle wing or tail feathers. A fan of ten eagle feathers at the
[302] back of the neck. Face painted yellow with various designs of lines and dots in other colors; white on shoulders and chest, the rest of the body blackened. Kilt of buckskin, with green belt and girdle of red yarn; beaded moccasins. The women
[292] wore the dark *manta*, two of them, the third, a Hopi ceremonial blanket dress. On their back, between the shoulders, a plaque set around with red yarn and eagle feathers. A large spot of red on each cheek; hair flowing; spruce twigs in each hand; wrapped moccasins.

The first figure was stepping sidewise in line, men and women alternating. In the second figure the men used their hoop as if it were a skipping rope, jumping through it forward and backward, twice. The third figure consisted of quadrille-like manouvers. The set danced first at C, then at D, then on the south side of the town in front of a house towards the east not indicated on the map. They conclued with a dance in front of their own house into which they withdrew. The afternoon appearances I did not see.

● A guard and three old men accompanied the dancers.

114 Benina of Nambé referred to the dance as an old time
x535 Tewa dance, and Benina's San Juan husband said it was a
x796 kachina (*oxuwah*) dance performed at San Juan, in the spring when the willows began to leaf out. I incline to think that some other dance was being referred to both by Benina and her husband; for later Benina opined that the Christmas Santa CLARA DANCE WAS NEW.

AT NAMBE AND TESUQUE, PROBABLY ELSEWHERE, A WOMAN CALLED "POKAWAKWI"

778 road bring in woman, brings in the kachina youths, she makes
796 the road for them. (Pl. 19.)

[276) In ritual smoking, the smoke is blown along the "road" into the medicine bowl.

RITUAL SMOKING

San Juan

796
276 During the Turtle dance the Winter Man and Summer Man smoke a long pipe (*sako*) into the medicine bowl from which they are going to sprinkle the dancers. No doubt this is here as elsewhere a cloud-making rite. Native tobacco (*poqsa*, water run tobacco) is used, the supply of which is, inferably, in the keeping of the Town chiefs. [622]

[538] In a San Juan folk-tale a cigarette is given to the winners in a trial of magic. In another tale the ceremonialists smoke the long pipe and then give a smoke to the youth about to go on magical enterprise.[443] In the account of an obsolete dance at San Juan there is mention of giving a pipe (i.e.,
431 cigarette) on inviting to dance.[444] Should a man want help in
576 cutting wheat, he might give a cigarette and some meal to the
[476] governor, who would then summon the townsmen at large to
[622] [525] cut. The cigarette and meal might also be given to the chief of any ceremonial group—Summer Man or Winter Man, *kossa sendo*, or *pufona sendo*, who would then summon the members of his group.[445]

Analogously, on making any request, some loose tobacco may be given to any one, who then "has to do it." For example, give some tobacco (and meal) to a guest who has declined to tell a story, and he *has* to tell the story. When
600 the cigarette hit the kachina who had changed himself into a

---

(314] [443] Cf. Robbins, Harrington, Freire-Marreco, 105, for the connection between smoking and magic (*pinqng*) in the minds of the Tewa of Arizona.

[444] Cf. Robbins, Harrington, Freire-Marreco, 105. "All requests and proposals made to a chief should be prefaced by giving him tobacco and making him smoke!" (Tewa of Arizona).

[445] Cf. Parsons 4: 168.

messengers, for the *kayé* (shrines), for the *towa'e*, and for the Corn girls the order is: north, blue-green; west, yellow;[476] south, red; east, white; zenith, dark; nadir, speckled or spotted.[477] In a San Juan folk-tale lakes are named in the color circuit—*potsawesɛno*, water blue old man, *potseyisɛno*, water yellow old man, *popisɛno*, water red old man. The actual cardinal springs of San Juan show some irregularity in the color-circuit.[478] 822 823 [538]

The moieties have color associations. "Everything of Winter people is white; everything of Summer people is yellow or blue." (S.C.) And the moieties are associated with directions, at San Juan, the Winter people, with the eastern hills, the Summer people with the western hills; at San Ildefonso, the mesa to the north (*tųyo*, "belongs to" the Summer people the mesa to the south (*shuma*), to the Winter people. A north and south division is expressed in the racing ritual of San Juan as well as an east and west division—Winter people, north and east, Summer people, south and west. At Nambé the Winter people stand to the east, the Summer people to the west. 822 823 616 [526] [796]

As elsewhere, notably at Isleta and Zuñi, the left hand is associated with the dead. Food offerings are made to them with the left hand. In the San Juan folk-tale of the youth who 775 [823] 826 538

---

[476] Consistently, in a San Juan folk-tale, *Oxuwah tseyi pewake* appears in the west, on top of Tsikomo, where in a Santa Clara tale Olivella Flower boy is turned into a yellow snake. Again, in San Ildefonso folk-tale, Blue (kachina) boy directs Blue Corn girl to look on the north side, in order to see him. In all but Tewa pueblos, blue is the color of the west, yellow of the north. But color direction associations are not as standardized as the literature would indicate. Individuals vary somewhat in their ideas. [538]

[477] Harrington gives (2, 43) for zenith, all-colored; for nadir, black. And in folk-tales about the Cloud beings I get the same order. Possibly the order is not the same for the Corn girls and for the Cloud beings. However, one San Juan man gives all colors for the Corn girls of the zenith, and black for those of the nadir. In this man's folk-tale about the Corn girls the order he follows is Blue Corn girls, Yellow Corn girls, Speckled or All colors Corn girls, White corn girls. [114] [538]

[478] See p. 257; Parsons 4: 17.

APPENDIX

FOLK-TALES FROM NAMBÉ[646]

How the Blue Corn Girls Escape Flood and Found Nambé

773 *Owewehambaiyo* at Nambé *hųochule'e* (green corn kiva) lived 539 *hųtsimbukwiyo* (Shrivelled corn old woman), *uruto sendo*, (Crook prayer-stick old man), and their daughters, *kųntsanyoanyo*, Blue corn girls. Crook prayer-stick old man used to make cigarettes. He would go to work every day at *sąwąkehinde* (sandstone, neck, pointed)[647] to make cigarettes. This he did all the time. One day an old Cloud man, *uxo sendo*, came around. He looked about and walked like a Cloud man. When Crook prayer-stick old man saw him, *uxo sendo* called, Ho! ho! ho! like the *kossa*. Crook prayer-stick old man said, "What are you doing around here? What news have you?" He kept on walking. He moved around a cedar and came out as *sawądį*[648] (sandstone pointed). Crook prayer-stick old man got mad. He said, "I was not after you, *sawądį*, I was after *uxo sendo*." He got a cigarette and threw it at the bird and missed it, and he kept on throwing his cigarettes, and then one fell on the bird and he turned to *uxo sendo*. He said, "*Ehé ehé, uruto sendo*," and he whipped him with his yucca blades. "Why are you so angry? What news have you?" said Crook prayer-stick old man. "Yes, I have some news. They sent me from the big lake to bring some news. The news is for you to get ready. You must tell all your pueblo that the world is going to be full of water in four days. [He meant four years.] You must tell all the people to get ready to wear all their good clothes. Now you must be watching." [Crook prayer-stick old man was the Sum-

---

[1147] [646] These tales were recorded after my general collection of Tewa tales was in proof.

[647] See Harrington, *2*, 374.

[648] Unidentified bird.

kukaiye sendo. Then they ordered the pueblo as it should be, 539 they put the houses there and the kiva. They had lots of 773 *pinang*. Next day at dawn in every house women were grinding and singing. A little later smoke came out from the houses and the people began to visit and to say good morning. The men were coming from the hills where they had gone to feed their gods and from the river where they had gone to bathe. The whole pueblo was alive and happy. . . . . We Nambé people are the children of the Blue Corn girls.

The Envious Corn Girls[555]

Owewehǫbayo, long ago it happened, at[556] *kųochete'e*, corn green building, they lived, *kǫtsanyoanyǫ* (corn blue girls), *kǫtseyeanyǫ* (corn yellow girls),[557] *kǫtųwianyǫ* (corn all colors girls). *Kontsaianyǫ* (corn white girls) were always grinding. Blue Corn girls and Yellow Corn girls and All Colors Corn girls came together and talked about asking White Corn girls to grind with them. White Corn girls[558] were married to Tininipowienu, Olivella flower boy. Blue Corn girls, Yellow Corn girls, All Colors Corn girls were jealous of White Corn girls. They wanted their husband. White Corn girls did not want to go to grind at their house. They told them they had their own grinding-stones. The others tried to make White Corn girls come. They said, "We could not make them come to grind, but we will invite them to come to get water at *potsaipokwime*[559] (water

---

[555] Told by a San Juan man, with Nambé interpreter.

[556] Sounded by Nambé interpreter as *kų*.

[557] *Tsǫgi* means the same. In spite of the order for the Corn girls followed in the tale, the narrator knew that All Colors or Speckled Corn girls belonged above, to the zenith.

[558] Here the interpreter slipped into the singular which she used throughout [114] the rest of the story. She insisted, however, that there were always two girls. There being no dual number in English, no doubt the singular is easier to manage than the plural. Until the final incidents of the story where the plot itself seems to require the singular I am keeping to the plural.

[559] On the north side of San Juan, one of the sacrosanct springs giving water for [778] medicine and pigments.

2;Henderson & Harrington N, E-5 (1910-1911)1914 NT18 Tewa NT18

ETHNOZOOLOGY OF THE TEWA INDIANS

By Junius Henderson and John Peabody Harrington[1]

GENERAL CONSIDERATIONS

THE fauna of a region, like its flora and geology, bears an inti- 121
mate relation to the culture of its human inhabitants.[2] A nomadic people is generally of necessity dependent on animal life for sustenance, while a sedentary people, if numerous, remaining for a long period in permanent habitations, must be dependent more largely on direct products of the soil, except perhaps when living on the seashore, where almost inexhaustible fisheries furnish abundant food, or near the range of such animals as the caribou or the now nearly extinct American bison. A large number of people remaining constantly in one place and depending the year round on the game of the region would soon destroy their food supply. A nomadic tribe, wandering hither and thither, is constantly penetrating new game preserves and allowing the game in the old preserves to increase in abundance.

The ancient peoples, the remains of whose dwellings are found so 121
abundantly in the country of the Tewa Indians, northwest of Santa 172
Fe, New Mexico, were surely too numerous to have derived any considerable part of their sustenance for even a few months from the native mammals, birds, and other animals of the region, even if game were much more abundant than now, a condition which may well be doubted. If the simultaneous occupancy of only a small proportion of the ruins be supposed, there still would not have been enough game to support the population. However, it is probable [262]
that wild game formed an important supplement to the products of their cornfields and the native plants.

Bandelier[3] says of the region about the Rito de los Frijoles: 136x

> Game of all kinds, deer, elk, mountain sheep, bears, and turkeys, roamed about the region in numbers, and the brook afforded fish.

In a footnote he adds:

> All the kinds of game mentioned were abundant around the Rito de los Frijoles in former times, but the communal hunts of the Pueblos, and later on the merciless slaughter of the Apaches, have greatly reduced it.

---

[1] The ethnological portion of this memoir is the work of Mr. Harrington, the zoological, that of Professor Henderson. [114.]

[2] Springer, Frank, The Field Session of the School of American Archaeology, *Science*, n. s., XXXII, 622, 1910.

[3] Bandelier, A. F., Final Report of Investigations among the Indians of the Southwestern United States, Carried on Mainly in the Years from 1880 to 1885, Part II, *Papers Archaeol. Inst. Amer.*, Amer. ser., IV, 141, 1892.

> X 136 were observed. Remains of the beaver and small rodents, and bones of birds, especially
> 172 the turkey, eagle, hawk, and owl, were noted.
>
> Remains of the dog and turkey were found in nearly every ruin, showing the
> extent of the domestication of these animals in this region. So far as can be determined,
> [231] the dog and turkey were the only animals domesticated by the pueblo tribes.
> It was hoped that light might have been thrown upon the question of domestication
> of other animals, namely, the deer [citing Nadaillac] and an auchenia (llama), as
> affirmed by Cushing from figurines found on the Rio Salado, in Southern Arizona.
> The writer has copied numerous pictographs in the valley of the Little Colorado
> River showing unmistakably the herding of turkeys and of deer by men. . . .
> Still, the evidence presented so far as to the domestication of other animals than the
> dog and turkey is unsatisfactory.

114 Zoological field work was conducted for slightly less than four weeks
121 in the neighborhood of El Rito de los Frijoles in August, 1910, so
that this account can not be considered in any sense a final discussion
of the fauna of the vicinity. Collection and observation were
conducted chiefly in the lower part of the Rito de los Frijoles canyon
and on adjacent mesas, but included a two-day trip to the Painted
Cave and a three-day trip to the top of the Jemez Mountains and
edge of Valle Grande, just beyond the headwaters of the Rito, so
that a general impression of the fauna from the top of the mountains
to the rim of the Rio Grande canyon was obtained. Judge A. J.
[115] Abbott, who now lives at El Rito de los Frijoles, Mr. Nathan Dowell,
who has hunted and trapped in the region, and several of the Indians
employed in the archeological excavations have furnished much information,
which a short summer trip could not disclose. In case of
114 the birds especially only observations carried through the four seasons
could make it possible to secure a list even approximately complete,
on account of the number of migratory species which must visit
the vicinity. Obviously the birds seen were all either permanent or
summer residents, winter residents and spring and autumn migrants
being then absent. To the list have been added such species as have
been recorded for the Rio Grande valley between the Colorado line
and a point southwestward from Santa Fe, so far as they could be
noted in the limited examination of the literature which has been
possible. Time has not permitted as full an examination of the
zoologic literature of the region as is desirable, and much information
is hidden in works whose titles do not suggest at all the inclusion
of anything zoologic.

133 The region is within the southern extremity of the great Rocky
Mountain system. Northward, mountains extend in unbroken chains
through Colorado. Southward, instead of continuous chains there
are isolated mountain masses separated by dry mesas and plains.
Consequently the affinities of the fauna as a whole are with the mountain
fauna of Colorado. The great majority of species are found
northward to or through Colorado. A few, as *Ashmunella*, are of
distinctly southern type.

It was hoped to do a large amount of ethnozoologic work while in 114
the field. Unforeseen circumstances prevented this except for a few 121
hours of the last two days of the field season. Mr. Harrington, how-
ever, was able to do some independent work along that line in con-
nection with his regular studies of the language of the Tewa. The [104]
Indian names given are in the San Juan dialect of the Tewa language,
except where otherwise stated. The greater part of the discussion
of methods in ethnobotany in Bulletin 55 applies with equal force
to ethnozoology and needs not be repeated here.

Most of the animal names were obtained by exhibiting specimens 125
to several Indians, including some of the older men of the tribe. Where specimens in hand were not available, care was taken to make sure of the identity of the animals named; this was easy, of course, in case of such readily described animals as the porcupine. In a few cases it was considered safe to use good colored plates figuring easily identified species; but wherever possible specimens in hand were exhibited and also the same species alive in their natural habitat. Where there is a question as to identity the name is either omitted or the doubt is expressed. It is always best to show informants also specimens of all species in the region which closely resemble one another and discover whether they really definitely distinguish them, and, if so, how. Care should always be taken not to suggest to them the answer to inquiries.

It is frequently said by unthinking or uninformed persons, who 815
know something of the Indians' intimate knowledge of some phases of nature, that the American Indians know and have names for every species of plant and animal living in their vicinity. Inasmuch as some microscopic forms exist everywhere and as many macroscopic forms of invertebrates, as some insects, crustaceans, and mollusks, can be distinguished only by microscopic characters, the incorrectness of that idea is evident. The Indians are usually correct in distinguishing the larger and better-marked species of birds and mammals, but they certainly do not recognize some of the minute differences which are of more importance than some of those more easily observed. They distinguish species more closely than the average white man who has not had zoologic training. Though several species of jackrabbits and several cottontails inhabit the region over which these Indians have roamed, they seem to recognize but one species of each. However, the majority of white men could not do more. The Pueblo Indians who claim the Jemez Plateau as the home of their ancestors are agriculturists, not hunters, though they do some hunting, of course, just as white farmers do. It would be interesting and important to make a thorough comparative study of the knowledge of natural history possessed by agricultural tribes and hunting tribes.

generations with modern scientific ideas of species, their interrelations, 815 and the development of various groups of species from common 825X sources. In discussing such matters, one's words, whether one speaks in his own language or attempts to apply a primitive [114] language, represent definite mental concepts, but may convey to [124] primitive people, who have not such concepts, ideas quite foreign to those intended. So also we are in constant danger of unconsciously injecting our own concepts into the words used by our informants in expressing their ideas. It is exceedingly difficult to question them about abstract ideas without framing the queries so as to suggest one's own views and thus color the replies.

Care must be taken to avoid mistaking descriptive or comparative 114 terms for names. When an Indian informant is shown a foreign 124 species with which he is not familiar, he may, as is the case with a 196 representative of any other race, designate it by what appears to be a name but which on analysis proves to be a descriptive or comparative word or phrase and not a native name for the species, as when a small white marine shell is exhibited and a word is applied which means that it looks like bone.

That the Indians have been close observers of animals is shown 192 by the fact that they have developed names for almost all the parts of 825X birds and mammals, as claws, whiskers, foot-pads, etc.

If work in ethnozoology is to be maintained on a scientific 121 basis and an accurate estimate made of the Indian's knowledge of Nature, definite determinations of the species of plants and animals discussed must be made. Much of the work hitherto done in obtaining the names of plants and animals has been worthless, because no attempt was made to discover and record with certainty the kind of plants and animals to which the names are applied. Much more important than mere nomenclature is the idea of which nomenclature is but an attempted expression. The best way certainly is to get the information in the field, so far as possible by showing the Indian informants the animal in its natural environment. Specimens thus identified and discussed should then be scientifically identified and preserved for future reference.

CLASSIFICATION OF ANIMALS

There is no word meaning 'animal'. *'Animąų* or *'animal* (<Span. 192X *animal*) is sometimes heard. 825X

No word meaning 'mammal' is in use. Bats are considered birds.

Towà, 'human being', distinguishes man from other animals, and sometimes Tewa or again all Indians from other kinds of men.

Hę·pǫ̨ now applies to large domestic animals, as horses, cattle, swine. What it referred to in pre-European times is uncertain.

x136 *Ke'a.*

x192 *Taxidea taxus* Schreber. Badger.

x825 Hodge gives as Badger clans of various pueblos: San Juan, *Kéya-*
(171) *tdóa;* Santa Clara, *Keä-tdóa;* San Ildefonso, *Kéa-tdoa;* Jemez, *Son-*
(614) *sadeh;* Pecos, *So'hl+;* Laguna, *Chópï-háno*^{ch}; Sia, *Tyúpi-háno;* Zuñi, *Tónashi-kwe.*

We found no badgers nor their holes at El Rito de los Frijoles, and could learn of none. At the old Buckman sawmill, at the base of the Jemez Mountains, we chased two into their hole, but did not get them. Two of the Indians told, with much glee, of the fighting qualities of this animal and its great energy in digging. They told also of how a badger caught one of them by the trousers and held on until it was dragged a long distance to the river and into the water.

Sǫ·.

Mephitis mesomelas varians Gray. Long-tailed Texas Skunk.

The Indians report striped skunks at San Ildefonso, which appears to be within the probable range of this species. We learned of no spotted skunks, though the region is between the known range of the Rocky Mountain species (*Spilogale tenuis* Howell) and that of the Great Basin species (*Spilogale gracilis saxatilis* Merriam), so one or the other probably occurs within our area. Skunk skins are used
[237] by the Tewa for ceremonial purposes.

Ke· (akin to Taos *kǫ̈aanä*, Isleta *kǜaire*, bear).

Bear (any species).

Ursus horribilis Ord. Grizzly Bear.

Ursus horribilis horriæus Baird. Sonora Grizzly.

Ursus americanus Pallas. Black Bear.

The Jemez name is *rwälą;* the Cochiti name is *kóhaju*, the Hopi name *hónaù'w.*

171 Hodge gives as Bear clans at various pueblos: San Juan and Nambe,
614 *Ke-tdóa;* Hano, *Ké-tówa;* Pecos, *Whalatdásh;* Acoma, *Küwhaia-hánoq*^{ch}; Sia, *Kohai-háno;* San Felipe, *Kóhai-háno;* Cochiti, *Kúhaia-hánuch;* Zuñi, *Aíñshi-kwe.*

x136 As is usually the case, the hunters interviewed, white as well as
[114] Indian, were not sufficiently familiar with the species of bear to give
x192 definite information. Whites talked about black, brown, and cin-
x825 namon bears, all of which refer to color phases of the black bear, which is not at all uncommon in the region. We occasionally saw bear tracks. The Indians vaguely described five kinds of bear: *ke· ȿæ̨·'i'ⁱ hehæ̨ñu'i'ⁱ*, 'big white bear' (*ke·*, bear; *ȿæ̨·*, white; *hehæ̨ñu*, big); *ke· ȿæ̨·'i'ⁱ tʃæ̨·'i'ⁱ*, 'little white bear' (*ke·*, bear; *ȿæ̨·*, white; *tʃæ̨·*, little); *ke· ȿæ·ɲ'i'ⁱ*, 'yellow bear' (*ke·*, bear; *ȿæ·*, yellow); *ke· 'ǫwà'ⁱ*, 'brown bear' (*ke·*, bear; *'ǫ*, brown); *ke· p'ę·ŋdi'ⁱ*, 'black bear' (*ke·*, bear; *p'ę·ŋ*, black).

As this region is within the range of the grizzly, the "white bear" may refer to either *horribilis* or its subspecies *horriæus*, more likely

! ———.

Sialia mexicana bairdi Ridgway. Chestnut-backed Bluebird. 136x

Abundant everywhere on the mesas, but none in the canyons. Our 825x Indian informants had noted the same fact.

Palomà (<Span. *paloma*). 136x 192x

Domestic Pigeon. 825x

Gatschet[1] incorrectly gives "parôma" as the Tesuque name for [114] pigeon. [231]

Perikù (<Span. *perico*).

Pañ (<Eng. polly).

Hodge gives as a Parrot clan of Zuñi, distinct from the Macaw clan, *Píchi-kwe*; there is also the testimony of Lummis that there is no Parrot clan at Isleta.

Tuñį.

Macaw.

This is the bird which the Mexicans call *guacamayo*. Its feathers [237] are highly prized by the Tewa for ceremonial purposes. They state [439] that the feathers and also live *tañį* were obtained from Mexico in former times. The informants stated that a *tañį* is at the present [235] time kept in a cage at Santo Domingo pueblo.

Hodge gives as Parrot clans of various pueblos (which are possibly 171 Macaw clans): Laguna, *Shâwítí-hâno*^ch; Acoma, *Shâwit*^t*-hanoq*^ch; Sia 614 and Santa Ana, *Shô'witi-hâno*; San Felipe, *Shô'wati-hâno*; and as a Macaw clan of Zuñi, *Múlakwe*.

Tsiie ts'e·ji^n, 'yellow bird' (*tsiie*, bird; *ts'e·*, yellow). 136x 192x

Canary. 825x

Some of the Mexicans who live in the Tewa country keep these birds in cages and call them *canarios*.

Pabowal (<Span. *pavo real*).

Peacock.

Some of the Mexicans who live in the Tewa country keep these birds.

The following are Tewa names of birds which we have not yet been able to identify with scientific names:

Petsep'e'^e*e*, perhaps the oriole.

Kasayuṃ, said to be similar to *ñæ·gwoạ*.

Ñæ·gwoạ, said to be similar to *kasayuṃ*.

Kwǫ·gwoạ, perhaps the common house swallow.

Po·sakṃ, described as a small bird with needle-like nose.

Ŋwæ·ytsiie, 'pine bird' (*ŋwæ·ŋ*, Pinus scopulorum; *tsiie*, bird). This is described as a small bird with gray body and white head, which jumps about in the rock-pines.

---

[1] A. S. Gatschet, Zwölf Sprachen aus dem Südwesten Nordamerikas, Weimar, 1876, p. [illegible].

of the New World appear to be the Gila monster and the Mexican 136X
beaded lizard, neither of which occurs in northern New Mexico. Among the snakes the only poisonous one known in the region is the rattlesnake. The wound made by any reptile or other animal having teeth capable of lacerating the epidermis or flesh may of course become infected, just as a scratch produced by any inorganic substance may, and thus create the impression that the poison was injected at the time of the bite. Our Indian informants considered the swifts and 136X
horned lizards harmless, but declared that the Sonora skink, of 825X
which a specimen was found by them, is poisonous. The Indians have the same so-called instinctive dread for the larger reptiles, particularly snakes, as the whites, being startled when suddenly they come upon one, and disliking to handle them. They informed us [262]
that neither snakes nor lizards are used as food at present by the Tewa, but it is not unlikely that their ancestors used them, at least during times of famine. However, they could not have been at any time more than an insignificant article of food.

There appears to be a widespread belief that the Indians of the [114]
Southwest generally are addicted to the use of reptiles for food. Whatever may be true of the past, this is not the case now. Russell's statement concerning the Pima Indians,[1] that "snakes are not eaten, even in times of famine, and the idea of eating lizards is repudiated with scorn," is applicable to many other Southwestern tribes.

LIZARDS

?——.

Crotaphytus collaris baileyi (Stejneger). Bailey's Collared Lizard. 136X

This fine lizard probably occurs throughout the region, though we saw none. *C. collaris* was reported at Santa Fe and San Ildefonso by Yarrow and Cope[2] long before the subspecies *baileyi* was described, but Stejneger[3] places our area within the range of *baileyi* and represents *collaris* as occurring from Pecos Valley eastward.

?——

Holbrookia maculata maculata (Girard). Common Spotted Lizard.

---

[1] Russell, Frank, The Pima Indians, *Twenty-sixth Ann. Rep. Bur. Amer. Ethn.*, p. 83, 1908.

[2] Yarrow, H. C., Report upon the Collections of Batrachians and Reptiles made in Portions of Nevada, Utah, California, Colorado, New Mexico and Arizona during the years 1871, 1872, 1873 and 1874, *U. S. Geog. Explor. and Survey W. of 100th Meridian*, v, p. 568, 1875; Check-List of North American Reptilia and Batrachia, with Catalogue of Specimens in U. S. National Museum, *Bull. U. S. Nat. Museum*, no. 24, p. 55, 1882. Cope, E. D., The Crocodilians, Lizards, and Snakes of North America, *Ann. Rep. U. S. Nat. Museum for 1898*, pp. 246-51, 1900.

[3] Stejneger, Leonhard, Annotated List of Reptiles and Batrachians Collected by Dr. C. Hart Merriam and Vernon Bailey on the San Francisco Mountain Plateau and Desert of the Little Colorado, Arizona, with descriptions of New Species, *North American Fauna*, no. 3, U. S. Dept. Agr., pp. 103-05, pl. XII, 1890. Ruthven, A. G., A Collection of Reptiles and Amphibians from Southern New Mexico and Arizona, *Bull. Amer. Mus. Nat. Hist.*, XXIII, pp. 513-14, 1907.

TURTLES

x136 x192 Only one name for species of turtle or tortoise was obtained from the Tewa—this is *'o·ku·*.

x825 The *'o·ku·* is common in the region. These turtles are found mostly in meadows. They are killed and the carapaces are cleaned and worn by dancers.

AMPHIBIANS (BATRACHIANS)

x136 The amphibians of the region are not very important. Salamanders are rare, and the lack of water restricts frogs and toads to limited areas. Except the frogs, they are of no food value. None of them is poisonous, though it seems that the whites generally look upon the spotted salamander with fear. Having no specimens we x[825] could not determine whether the Indians had the same dread.

?———

Ambystoma tigrinum (Green). Tiger Salamander.

Reported at Santa Fe Creek, under the name *Ambystoma mavortium* Baird, by Yarrow,[1] and by Cope[2] under the name *tigrinum*. *Ambystoma trisruptum* Cope was credited to Santa Fe by Yarrow,[3] but Cope[4] says the only known specimen is from Ocate Creek, east of the mountains in northern New Mexico, and hence not in the Rio Grande drainage.

?———

Spelerpes multiplicatus Cope(?).

We found a small salamander rather common under aspen logs near Valle Grande, in the Jemez Mountains. Specimens badly injured in transit were doubtfully identified as this species by Dr. x[192] Leonhard Stejneger. The Indians to whom it was shown were not x[825] familiar with it and had no name for it.

?———

x136 *Bufo lentiginosus woodhousei* (Girard). Rocky Mountain Toad.

x825 114 *Bufo lentiginosus woodhousei* was reported at Santa Fe and Plaza del Alcalde in 1874, by Yarrow,[5] who remarked that it was "apparently numerous in New Mexico." In his Check-List[6] he gives the Plaza del Alcalde record under the name *americanus*, does not recognize *woodhousei* as a distinct form, and omits the Santa Fe record.

---

[1] Yarrow, H. C., Check-List of North American Reptilia and Batrachia, with Catalogue of Specimens in U. S. National Museum, *Bull. 24, U. S. Nat. Museum*, p. 149, 1882.

[2] Cope, E. D., The Batrachia of North America, *Bull. 34, U. S. Nat. Museum*, p. 68, 1889.

[3] Yarrow, H. C., op. cit., p. 169.

[4] Cope, op. cit., p. 68.

[5] Yarrow, H. C., Report upon the Collections of Batrachians and Reptiles Made in Portions of Nevada, Utah, California, Colorado, New Mexico, and Arizona, During the Years 1871, 1872, 1873, and 1874, *U. S. Geog. Explor. & Surv. W. of 100th Merid.*, v, p. 521, 1875.

[6] Yarrow, H. C., Check-List, etc., op. cit., p. 166.

Cope[1] recognizes *woodhousei* and records it from other localities in 136x
New Mexico, but not from these two places or from anywhere in our 825x
area, and preserves Yarrow's *americanus* record at Plaza del Alcalde. 114
Miss Dickerson[2] raises *americanus* to a full species, and says it "is the common toad east of the Rocky Mountains from Mexico to the Great Bear Lake," while she leaves *woodhousei* as a subspecies of *lentiginosus* and says it is "the common toad of the Rocky Mountain region," having been reported from a number of States, including New Mexico. Ruthven[3] says it is the "common toad of the Great Plains and Great Basin region."

Our San Ildefonso Indian informants reported "two kinds of 136x
frogs" in the region of the Rito de los Frijoles, one of which is found 825x
in the water, the other being larger and flatter and is found "jumping" about on land. Probably the latter is a toad. As *Bufo cognatus* Say is reported from Colorado, Kansas, and Arizona, it may extend across New Mexico, or at least be found in the northern portion.

? ——

Rana pipiens Schreber. Leopard Frog.

Frogs were recorded at Taos, Abiquiu, and Santa Fe under the 136x
name *Rana halecina berlandieri* (Kalm) Cope, and at Taos under the name *Rana halecina halecina* (Kalm) Cope, by Yarrow.[4] Cope afterward transferred these records to *Rana virescens brachycephala* Cope.[5] Miss Dickerson[6] says *virescens* is Schreber's *pipiens*, which she is unable to separate into subspecies. Further study of this variable frog, based on large quantities of fresh material from widely separated and numerous localities, is desirable. We saw several frogs at El Rito de los Frijoles, but unfortunately obtained none. (See note on Rocky Mountain toad, page 52.)

SALAMANDERS, FROGS, TOADS

The Tewa appear to have but one name for all species of sala- 136x
manders, and but one name for all species of frogs and toads. 192x

Po·qwǫ means salamander. The first syllable is clearly the word 825x
meaning 'water.'

P'ęŋkwǫŋ is applied to frogs and toads. Tadpoles are called *p'ęŋkukeʌe* in the San Juan dialect, and either *po·sakeʌe* or *p'ęŋpukeʌe* in the San Ildefonso dialect. The etymology of these words is not clear. It was thought by one informant that the tadpole's tail drops off.

---

[1] Cope, E. D., op. cit., pp. 281–82.

[2] Dickerson, Mary C., The Frog Book, pp. 63, 91–92, New York, 1906.

[3] Ruthven, A. G., A Collection of Reptiles and Amphibians from Southern New Mexico and Arizona, *Bull. Amer. Mus. Nat. Hist*, XXIII, p. 509, 1907.

[4] Yarrow, H. C., Check-List, op. cit., p. 161.

[5] Cope, E. D., op. cit., pp. 403–04.

[6] Dickerson, Mary C., op. cit., p. 171.

X136 *Rhinichthys cataractæ dulcis* Girard (*R. maxillosus* Cope). Sweet-water Dace. Tierra Amarilla, Abiquiu, San Ildefonso, and Taos.

Hybopsis æstivalis (Girard) (*Ceratichthys sterletus* Cope). Horny-head. San Ildefonso.

Anguilla rostrata (Le Sueur) (*A. tyrannus* Girard). Fresh-water Eel. Near Santa Fe.

They also report *Salmo pleuriticus* Cope from Rio Taos, Chama River, and near San Ildefonso, but as this species seems to be confined to the Colorado River basin the record is probably a mistake. There are perhaps other fishes existing in the Rio Grande drainage of northern New Mexico, but we have found no record of them. The species are mostly small and of little food value. There are rumors of catfish, but no definite record.

X136 The Tewa have the following names for species of fish:

X192 *Pįŋpa·*, 'mountain fish' (*pį·ŋ*, mountain; *pa·*, fish). This name
X825 seems to be applied to any species of trout.

Pa·tsi·jo·, 'knife fish' (*pa·*, fish; *tsi·jo·*, knife). This fish lives in the Rio Grande. It has a knife-like back, and there is also a knife-like projection at each side of its lower jaw. It reaches a length exceeding a foot.

Pa·wa·p'a·, 'flat-chested fish' (*pa·*, fish; *wa·*, chest, breast; *p'a·*, flat and roundish). This fish lives in the Rio Grande and attains a length of 2 feet or more. Its underside is flat.

Tsewigè. This fish lives in the Rio Grande. White men in talking to our informants had called this fish a "sucker."

Pa·tųŋwæ̨·, 'tall fish' (*pa·*, fish; *tųŋwæ̨·*, tall). This fish lives in the Rio Grande. The Mexicans call it *boquinete*.

Pa·'e·, 'little fish' (*pa·*, fish; *'e·*, diminutive). This term is applied to any small fish, especially to minnows and the like; also to the young of larger varieties of fish, which often can not be recognized as they can when more mature.

Pa·'oqwi·, 'phlegm fish' (*pa·*, fish; *'oqwi·*, mucus from the trachea, bronchial tubes, or lungs, such as is coughed up). This name is applied to any species of eel. The skin of the *pa·'oqwi·* is highly prized and is used among other purposes for leggings and moccasins. The fish lives in the Rio Grande.

It is said that the kinds of fish which live in the Rio Grande would probably also be found in the Rio Chama.

INSECTS

114 Notwithstanding their average small size, when compared with
X136 vertebrates, insects are very important from the point of view of natural history. Their interesting habits, their economic relations

to other animals, and the exceedingly large number of known species 114
give them zoological prominence. Their relations to the pollenization 136X
of plants and their destructiveness to vegetation give them both
botanical and economic importance. Their relation to the spread of
disease and the annoying habits of some of them have a direct bearing
on the comfort and happiness of the human race.

From the ethnological point of view the position of insects is a
minor one. They have little importance as food, except the grasshoppers, 171
etc., during seasons of abundance. Among native peoples
of the lower Colorado Valley insects have acquired considerable religious
and mythical significance, especially the ants, but this does not
require a knowledge of many species or a very minute discrimination
between species. Among the Pueblos they have no such significance.
A great number of insect species have been recorded from the Jemez 136X
Plateau and Santa Fe. There are doubtless hundreds of others unrecorded, 192X
including many now undescribed and unknown to science. 825X
As most of the smaller species are distinguished from one another by
characters which may be studied only with a good lens or a microscope,
it is obvious that in most cases the Indians can not distinguish
the species or even the genera. However, the larger and more
conspicuously marked species are likely given definite native names.
It would be an interesting contribution to the psychology of the
Indians for someone with sufficient entomological training to investigate
their knowledge of and ideas concerning the insects and the
extent and accuracy of their discrimination, including the habits of
insects and their relations to plants.

Time did not permit us to enter into this field except in an incidental 114
way in connection with the ethnobotanical work. Our collections 136X
of insects were accidentally almost wholly destroyed in transit, without
having been determined or recorded, so that we can not even
give an account of the species found. We found many species of
beetles, ants, bees, wasps, butterflies, moths, flies, and other insects.

It does not seem important in this report to list the species of
insects recorded from the region by Ashmead, Banks, Cockerell,
Coquillett, Dunning, Fall, Fox, Gillette, Hagen, Holland, Howard,
Hulst, Mead, Scudder, Thomas, Townsend, Uhler, Ulke, and Wheeler.
More than 30 of Prof. Cockerell's papers report species from this
region. Ulke has recorded 56 species of Coleoptera (beetles), and
Uhler has recorded 34 species of Hemiptera (plant-lice, scale insects,
true bugs, etc.) from San Ildefonso, Taos, Santa Fe, Abiquiu, and
Tierra Amarilla. Hagen recorded three species of Neuroptera from
San Ildefonso, Tierra Amarilla, and Taos. Most of the other records
are from Santa Fe.

Work along this line could be easily done by persons with very 000
limited knowledge of entomology. They could collect the insects

THE ETHNOGEOGRAPHY OF THE TEWA INDIANS

By John Peabody Harrington

INTRODUCTION

This paper presents the geographical knowledge of the Tewa 121
Indians of the upper Rio Grande Valley, New Mexico. These 131
Indians speak a language of the Tanoan stock, related to the Jemez
and Pecos languages, and again to those of Taos, Picuris, Sandia, [197]
Isleta, and the Piro. The Tewa inhabit at present five villages
by the Rio Grande: San Juan, Santa Clara, San Ildefonso, Nambé,
and Tesuque; and one, Hano, among the Hopi pueblos of northeastern
Arizona. The range of subjects is about the same as that
covered by a school textbook on geography. The information was 124
gathered chiefly in 1910, partly by systematic questioning, partly as
incidental to other information.

The difficulties encountered have been many. The Tewa are 123
reticent and secretive with regard to religious matters, and their cosmographical
ideas and much of their knowledge about place-names
are hard to obtain. Their country is rugged and arid. Most of the [133]
places visited were reached on foot in company with one or more
Indian informants whose names for obvious reasons are not here
given. The region has never been accurately mapped. All of the 102
maps at the writer's disposal are full of errors, many of the features 114
shown being wrongly placed or named, while others are omitted
altogether, and still others given where they do not exist. The
occurrence of many of the names in a number of dialects or languages
has not facilitated the work.

As in a school geography, cosmographical and meteorological 128
information is presented first. An alphabetically arranged list of
terms denoting the geographical concepts of the Tewa is next given.
The treatment of place-names follows. The region in which Tewa
place-names are more or less numerous has been divided into 29
areas, each of which is shown on a map.[1] The places are indicated
on the maps by numbers which refer to the adjacent text. Thus
arranged, maps and names will be found convenient for reference.
Names of places in Spanish, English, and various non-Tewa Indian
languages have been included. A list of tribal names and one of
names of minerals known to the Tewa conclude the paper.

---

[1] [These maps have not been processed for the files.-Analyst]

I. COSMOGRAPHY

The World

'Opa 'the world' 'the universe'. The word is perhaps akin to 772 Taos *ƥapų* 'sky'. *'Opa* includes everything that is. It is thought 776 of as being alive and is worshipped as *'Opasęŋʃ* 'Universe Man' (*'opa* 'world'; *sęŋʃ* 'man in prime'). The Milky Way is said to be its [821] backbone (see p. 51). The world is represented in Pueblo art in [532] various ways. Bandelier[1] writes:

> Here [among the Tewa], as well as among the Queres [Keresan stock], we must distinguish between the heavens and the sky. The latter is a male deity called [114] O-pat-y Sen."

This statement is incorrect; *'Opasęŋʃ* is not the Sky but the World.

The Cardinal Directions and Their Symbolism

The Tewa distinguish six cardinal directions or regions, namely: 823 north, west, south, east, above, and below. They are usually named in the order here given. Tewa symbolism assigns series of colors, per- [822] sons, animals, plants, and inanimate objects to these cardinal directions.

Divinities in some instances are multiplied that one may be asso- [776] ciated with each direction. These cardinal identifications are not regarded as merely general information, but rather as a portion of secret ritual; therefore it is difficult to obtain information about them.

The names of the cardinal directions are clearly descriptive in origin. In the names of the four horizontal directions the postpound is 193 *pije* when 'in' or 'to' the region is expressed, *p'ǫ'ge* when 'from' 823 the region is expressed. *Pijesi* (*si* 'from') sometimes takes the place of *p'ǫ'ge*. The names are used as nouns, adjectives, and adverbs.

Ƥįmpije 'in the north' 'to the north,' *ƥįmp'ǫ'ge* 'from the north' (*ƥįŋʃ* 'mountain'; *pije* 'toward' 'direction'; *p'ǫ'ge* 'from the direction of').

Tsąmpije 'in the west' 'to the west', *tsąmp'ǫ'ge* 'from the west' (*tsąŋʃ* unexplained, but cf. *tsą'ndi'* 'yesterday,' and *ną'otsąnną* 'it is a little cloudy'; *pije* 'toward' 'direction'; *p'ǫ'ge* 'from the direction of').

'Akǫmpije 'in the south' 'to the south', *'akǫmp'ǫ'ge* 'from the south' (*'akǫŋʃ* 'plain'; *pije* 'toward' 'direction'; *p'ǫ'ge* 'from the direction of.')

---

[1] Final Report, pt. I, 1890, pp. 311-12; see Bibliography, pp. 446-47 of the present memoir.

193 *T'ǫmpije* 'in the east' 'to the east', *t'ǫmp'ǫ'ge* 'from the east'
823 (*t'ǫŋ∫* 'sun'; *pije* 'toward' 'direction'; *p'ǫ'ge* 'from the direction of').

'*Opaḳesi* 'in or to the top of the world or above', '*opaḳesip'ǫ'ge* 'from the top of the world or above' ('*opa* 'world'; *ḳesi* 'on top of' 'top'; *p'ǫ'ge* 'from the direction of').

'*Opanuge*, *nǫ̨nsogenuge* 'in or to the place under the world or down where the earth sits', '*opanugesi*, '*opanugep'ǫ'ge*, *nǫ̨nsogenugesi* or *nǫ̨nsogenugep'ǫ'ge* 'from the place under the world or down where the earth sits' ('*opa* 'world'; *nuge* 'below' 'under' 'down' <*nu'u* 'under', *ge* 'down at' 'over at'; *nǫ̨ŋ∫* 'earth'; *sogo* 'to sit'; *si* 'from'; *p'ǫ'ge* 'from the direction of').

Bandelier[1] gives the Tewa cardinal directions as "Pim-pi-i",
● 114 north; "Tzam-pi-i", west; "A-com-pi-i", south; "Tam-pi-i", east;
823 "O-pa-ma-con", above; "Nan-so-ge-ungo", below. These are for *p̦impije*, *tsǫ̨mpije*, '*akǫmpije*, *t'ǫmpije*, '*opamakowa*, and *nǫ̨nsogenuge*. '*Opamakowa* means 'sky of the world' ('*opa* 'world'; *makowa* 'sky') and is not the proper term. Bandelier does not name the points in their Tewa order.

Directions intermediate between the cardinal directions are defined
193 by postfixing *ja'a* 'between'; thus *p̦impijetsǫ̨mpijeja'a* 'northwest'
823 (*p̦impije* 'north'; *tsǫ̨mpije* 'west'; *ja'a* 'between'). More definite descriptions of points between cardinal directions of points appear not to be used. *Bö'e* 'dell' 'corner' is sometimes postpounded instead of *ja'a*.

Terms for the cardinal directions have been obtained in the neigh-
171 boring languages also. The Taos and Jemez have somewhat com-
823 plicated systems, position higher or lower than the speaker requiring different forms. Each distinguishes six directions. The Cochiti recognize six directions, which they name in the same order as do the Tewa.

CARDINAL COLORS

171 The color symbolism is the same at all the Tewa villages. It has
822 been obtained by the writer from all of them, that of some from a
823 considerable number of informants. This symbolism differs from that of some other Pueblo and non-Pueblo tribes of the Southwest. Thus, the Zuñi and the Hopi color scheme assigns blue to the north and yellow to the west, but otherwise is the same as the Tewa. The cardinal colors of Isleta have been obtained by Gatschet,[2] of Zuñi by Mrs. Stevenson,[2] of the Navaho by the Franciscan Fathers[3] and others, of the Apache by Gatschet,[2] of the Diegueño by Waterman.[4]

---

[1] Final Report, pt. 1, p. 311, 1890.

[2] Handbook Inds., pt. 1, p. 325, 1907.

[3] The Franciscan Fathers, An Ethnologic Dictionary of the Navaho Language, p. 55, Saint Michaels, Ariz., 1910.

[4] The Religious Practices of the Diegueño Indians (*Univ. of Calif. Publs. in Amer. Archaeol. and Ethnol.*, vol. 8, pp. 333-4, 1910.)

water are collected from the following four places, all situated near 778
San Ildefonso Pueblo: North, *Ɓuwogepokwį* [15:17]; west, *Potsįnæn-* 823
næpokwį [16:37]; south, *Potsįnd'ege* [19:123]; east, *Potsifu'u* [19:30]. 278
These places are also sometimes called, respectively, *pįmpije'įmpokwį*
'north lake' (*pįmpije* 'north'; *įŋ* locative and adjective-forming
postfix; *pokwį* 'pool' 'lake'), etc. The medicine water from the above
is rainwater; that from the below is obtained by digging a hole in the
ground where water can be reached. The water from the six sources
is mixed in a *wopoaa'i'ⁱ* 'medicine-water bowl' (*wo* 'medicine'; *po* [796]
'water'; *aa* 'to be', said of 3+; *'iⁱ* locative) and used ceremonially.

OTHER CARDINAL IDENTIFICATIONS

Mrs. Stevenson¹ mentions cumulus clouds, ants, "Ʌhayuta," etc., of 171
the six regions of the Zuñi. Certainly many Tewa identifications 823
remain to be obtained.

THE SKY

Makowa 'sky'. Distinct from *'opukeri* 'the above'; see under CAR- 776
DINAL DIRECTIONS. This is probably what Bandelier means when he 821
writes:² "Here [among the Tewa], as well as among the Queres [Keres-
an stock], we must distinguish between the heavens [the above?] and [114]
the sky. The latter is a male deity called O-pat-y Sen." "O-pat-y
Sen" is evidently for *'Opaseŋ* 'the World,' as remarked above under
THE WORLD. The sky is personated as *Makowasendo* 'Sky Old Man'
(*makowa* 'sky'; *sendo* 'old man'). The Sky is the husband of the
Earth, who is personified as *Nąŋkwijo* 'Earth Old Woman'; see below
under THE EARTH.

'In the sky' is expressed by *makowa* without locative postfix. 772
Thus the sun, moon, stars, the Christian God, etc., are said to live
or to be in the sky: *makowa t'ąn nąt'a* 'in the sky the sun lives' 821
(*makowa* 'sky'; *t'ąŋ* 'sun'; *ną* 'it' 'he'; *t'a* 'to live'). *Makowakɛ̨i*
means 'up in the sky' 'at the top of the sky' (*kɛ̨i* 'on top of').
Tewa stories tell of a pueblo in the sky in which an Indian from this
earth has adventures. The sun and the moon have their paths in
the sky.

SUN AND MOON

The sun is called *t'ąŋ*, the moon *po*. *T'ąŋ* is perhaps connected 776
with the word *t'a* 'day'. *Po* is used also with the meaning 'month'. 821
The divinities resident in the sun and moon are called *T'ąnsendo* 'Sun
Old Man' (*t'ąŋ* 'sun'; *sendo* 'old man') and *Posendo* 'Moon Old Man'
(*po* 'moon'; *sendo* 'old man'). Both sun and moon are male, as they

---

[1] The Zuñi Indians, pp. 21, 426.

[2] Final Report, pt. I, pp. 311-12, 1890.

776 821 are also in the belief of the Cochiteños, and the sun is never called 'father' and the moon 'mother', as among the people of Taos, Isleta, Jemez, and Zuñi.

[114] "The Tehuas [Tewa]," says Bandelier,[1] "call the sun T'han and the moon Po; and their principal deities bear the names of T'han Sendo, sun-father, and P'ho Quio, or moon-woman." The moon is never called *P'okwijo*, nor does *T'ą̄ŋsendo* mean 'sun-father.'

[771] Names for sun in other Pueblo languages are: Taos *t'ulenǝ*, Isleta *t'urie*, Piro (Bartlett) "pu-é", Jemez *pe* or *petʃæs*, Cochiti *óʃotʃa*, Zuñi *jǎ'ttokʃ'a* (Stevenson: "Yätokia . . . means bearer of light"), Hopi *tá'wa*. The moon is called: Taos *pænę*, Isleta *pairę*, Piro (Bartlett) "a-ó," Jemez *pá*, Cochiti *tá'watʃa*, Zuñi *jáǎnanne*, Hopi *mųjau'ų*.

There is in Tewa no name such as 'luminary' applied to both sun and moon.

821 The sun and moon pass daily from east to west over trails which run above the great waters of the sky. They see and know as do Indians here on earth. When they set they pass through a lake to the underworld and travel all night to the east, where they emerge through a lake and start out on their trails again. They know their trails,' *'imbi p'o* ('*iŋ* 'they 3+'; *bi* possessive; *p'o* 'trail'). Cf. Sanskrit *dyu-patha* 'sky trail,' Latin *cursus solis*. The trails are also called *'ok'imp'o* 'vapor trails' ('*ok'iŋ* 'vapor'; *p'o* 'trail').

When there is an eclipse the sun or the moon is said to die. The expressions are: *nąt'ą̄ŋtʃu* 'it sun dies' (*ną* 'it' 'he'; *t'ą̄ŋ* 'sun'; *tʃu* 'to die'), *nąp'otʃu* 'it moon dies' (*ną* 'it' 'he'; *p'o* 'moon'; *tʃu* 'to die'). The Indians never say *T'ą̄ŋsendo nątʃu* or *P'osendo nątʃu*, for the divine persons in the sun and moon can not die. "Our Lords can not die."

The sun is said to walk through the sky clothed in white deerskin and ornamented with many fine beads. The sun has a beautiful face *tse*, hidden by a mask, *t'ą̄ŋtse'ų* or *t'ą̄ŋbi'ų* (*t'ą̄ŋ* 'sun'; *'ų* 'mask'; *bi* possessive). An extracted tooth is thrown to the sun. "The summer sun is green, the winter sun yellow."[2]

Of a ring about the sun the Tewa say *T'ą̄ŋsendo 'okamą* 'Sun Old Man has a ring' (*T'ą̄ŋsendo*, see above; *'o* 'he' 'it'; *ka* 'ring' 'circle'; *mą* 'to have'). Mexicans of New Mexico call this phenomenon ojo del buey 'ox's eye'. The Indians say that it does not mean anything.

When the sun is "drawing water" the Tewa say *t'ą̄ŋbi pewą̄ŋ* 'the sun's tail' (*t'ą̄ŋ* 'sun'; *bi* possessive; *pewą̄ŋ* 'tail'). This phenomenon is seen when the sun is low in the sky, and the name is applied because the rays resemble a tail.

The emergence hole in the lake through which the sun rises is called *t'ą̄ŋk'oji* (*t'ą̄ŋ* 'sun'; *k'oji* 'emergence hole' 'roof-hole'). *Nąt'ą̄ŋpí*,

---

[1] Bandelier, Final Report, pt. I, p. 308, 1890.

[2] Ibid., p. 311.

3: Harrington E-5 (1910) 1916 NT18 Tewa NT18

Dì'ąŋ 'turkey foot' (*dì* 'turkey' 'chicken'; *'ąŋ* 'foot'). This 821
is an easily learned constellation of the exact form of a turkey's foot. The Mexicans do not know it. The Tewa also make a cat's cradle in the form of a *dì'ąŋ*.

Kųgwitsisipu 'belly of a sling' (*kų* 'stone'; *gwitsi* 'to sling'; *sipu* 'the hollow under a person's ribs'). This is applied to the Dolphin, or Job's Coffin, constellation. The Mexicans interviewed did not know it. It has the form of a sling belly.

P'ek'eto 'yoke' (*p'e* 'stick' 'wood'; *k'e* 'neck'; *to* 'to be in or on'). This is a translation of Spanish el Yugo, 'the Yoke,' name of the square part of the Little Dipper, or Ursa Minor, constellation.

The Milky Way has two names. *'Opatuk'ų* 'backbone of the universe' (*'opa* 'world' 'universe'; *tu* 'back'; *k'ų* 'hard straight thing' 'bone') appears to be the common name. It is called also *Ts̃ąŋk'oso* 'whitishness' (*ts̃ąŋ* 'whiteness' 'white'; *k'oso* element to weaken force of *ts̃ąŋ*). The Taos and the Jemez call the Milky Way by names which mean 'backbone of the universe.' The Mexicans usually call it el Camino del Cielo.

THE UNDERWORLD

No term for 'underworld' different from those meaning 'the below' 772
has been obtained. (See under CARDINAL DIRECTIONS.) The Tewa 773
declare that they believe in a single underworld, where the sun shines [821]
at night, pale like the moon. It was there that the human race and the lower animals lived until they found their way through *Sip'op'e* (see pp. 567-69) and entered this world. The underworld is dark and dank, and this world rests on top of it. The underworld is never personified; it is the base of *'opa* 'the universe.' When the sun sets in the west it passes through a lake (*pokwi*) and [821]
enters the underworld (*'opanuge* or *nąnsoŋnuge*), passing through the latter to reach the east (*t'ąmpije*) again.

In the underworld is situated *Wajima*, "the happy hunting-grounds" [775]
(see pp. 571-72). *Wajima* is described as a kiva-like place of the spirits of the dead. The word is akin to Cochiti *Wenima* and Zuñi [197]
Wéjima.

THE EARTH

Nąŋ 'the earth'; personified as *Nąŋkwijo* 'Earth Old Woman' 776
(*nąŋ* 'earth'; *kwijo* 'old woman'), wife of the Sky. Bandelier[1] says: 823
"The earth a female deity, called Na-ust-ya Quio, and totally distinct from the conception of below." "Na-ust-ya Quio" must be [114]
intended for *Nąŋkwijo*, as the Earth is not known by any other name. For the peculiar "-ust-ya" cf. Bandelier's "O-pat-y", quoted under THE SKY. According to Mrs. Stevenson[2] the Zuñi speak of "A'witelin

---

[1] Final Report, pt. I, p. 302, 1890.

[2] The Zuñi Indians, p. 23.

The shadow of a cloud is called *'okʷuwa'ok'y* (*'okʷuwa* 'cloud'; *'ok'y* 821
'shadow').

Cloudiness is *ną'otejnaną* 'it is a little cloudy' 'the sun is somewhat obscured by clouds' (*ną* 'it'; *'otejŋ* unexplained; cf. *tejmpije* 'west' and *tejndi* 'yesterday'; *ną* 'to be' postpound).

RAIN

"The rainy season is defined, inasmuch as it is limited to the months 132
of July, August, and September. . . . Weeks may elapse without the discharge of a single shower; then again weeks may bring a series of thunder-storms accompanied by floods of rain. During the other nine months of the year there are occasional days of rain, which usually comes from the southeast, and lasts until the wind settles in the opposite quarter. The same happens with snow-storms; the southeasterly winds are their forerunners, while northwesterly currents bring them to a close."[1] Most rains of the Tewa country come [114]
from the southwest, not from the southeast as Bandelier states.[2]

Rain is of supreme importance to the farmer in the Southwest. The 789
Tewa religion is replete with practices and prayers the object of 821
which is to bring rain and insure crops. There are also special dances 535
held by the Tewa for producing rain. These are called *kwąŋfaṣe*, *kwąmpafaṣe*, or *kwąmpinąŋfaṣe* 'rain dance' 'rain-making dance' 'rain-power dance' (*kwąŋ* 'rain'; *faṣe* 'dance'; *pa* 'to make'; *pinąŋ* 'magic power').

Rain is called *kwąŋ*. *'Ikwą'ndo'* 'it is raining' (*'i* 'it'; *kwąŋ* 821
'rain'; *'o'* progressive postpound, present). *'Ikwąnną* 'it has rained' (*'i* 'it'; *kwąŋ* 'rain'; *ną* verbifying postpound, perfect). *Nąkwąŋkuda'* 'it wants to rain' (*ną* 'it'; *kwąŋ* 'rain'; *ku* causative; *da'* 'to want'). *Kwąŋ'e* 'a drizzle' 'a little rain' (*kwąŋ* 'rain'; *'e* diminutive). *Kwąŋ hi'inąi'i* 'a little rain' (*kwąŋ* 'rain'; *hi'iŋ* 'little'; *'i'i* locative and adjective-forming postfix). *Bajeki 'ikwąŋndo'* 'it is raining much' (*bajeki* 'much'; *'i* 'it'; *kwąŋ* 'rain'; *'o'* progressive, present). *Hi'wqkwąŋ* 'good rain' (*hi'wq* 'goodness' 'good'; *kwąŋ* 'rain'). *Nąkwąŋwiŋ* 'the rain is standing', said when rain is seen in the distance (*ną* 'it'; *kwąŋ* 'rain'; *wiŋ* 'to stand'). *Nąkwąŋwiŋṣe* 'the rain stands yellow', said when rain is seen in the distance and looks yellowish (*ną* 'it'; *kwąŋ* 'rain'; *wiŋ* 'to stand'; *ṣe* 'yellowness' 'yellow'). *Nąkwąŋ'ą'* 'the rain is coming' (*ną* 'it'; *kwąŋ* 'rain'; *'ą'* 'to come'). *Fuwagi 'ikwąŋkomą* 'soon it will rain' (*fuwagi* 'soon'; *'i* 'it'; *kwąŋ* 'rain'; *komą* future). *Kwąmpo* 'rain water' 'rain' (*kwąŋ* 'rain'; *po* 'water'). *Kwą'ndiwe*

---

[1] Bandelier, Final Report, pt. 1, p. 18, 1890.

[2] See Henderson, Geology and Topography of the Rio Grande Region in New Mexico, Bull. 54, Bur. Amer. Ethn.

Kunʒąṭowà 'turquoise people' (*kunʒą* 'turquoise'; *ṭowà* 'person' 'people'), or
616 *K'ajé* (of obscure etymology). The Winter phratry is called *Tè'nuʃì'įŋṭowà* 'winter people' (*tè'nuʃì* 'winter'; *'įŋ* locative and adjective-forming postfix; *ṭowà* 'person' 'people'); *P'òṭowà* 'squash people' (*p'o* 'squash' 'pumpkin' 'gourd' 'calabash'; *ṭowà* 'person' 'people'), or *Kwęʃì* (of obscure etymology). The Summer people are
[622] presided over by the Summer cacique, *p'ò'ǫtụnjo* 'ceremony-presiding chief' (*p'o'ǫ* 'to preside at a ceremony', said of either Summer or Win-
[793] ter cacique); *tụnjo* 'chief', who is in charge of the summer ceremonies. The Winter people and ceremonies are in charge of the Winter cacique, *'ojíkètụnjo* 'hard ice chief' (*'ojí* 'ice'; *kè* 'hardness' 'hard'; *tụnjo* 'chief'). Bandelier[1] writes: "The [Tewa] altar (Cen-te) used in
● 114 the estufas is green for the summer months, yellow after the autum-
821 nal equinox." So far as the present writer has learned, the Tewa do not recognize equinoxes, but only solstices.

[551] Distinct personal names were considered appropriate for children according to the season in which they were born—summer or winter.

MONTHS

805 The Tewa year contained twelve, not thirteen months. In this it agreed with the Zuñi year according to Cushing (see the accompany-
[171] ing table). The months are said to have begun at the time of the new moon, but this subject needs further investigation. They are divided into summer and winter months (see under SEASONS). Month is called *p'o* 'moon'. The term *P'oṣęndo* is applied only to the divinity resident in the moon (see under SUN AND MOON).

The months were known by descriptive names, which are passing
[184] out of use. These names differed considerably according to the speaker and the village. The accompanying table gives month-names obtained from Indians of four Tewa villages; also Jemez and Zuñi month-names, the latter from Cushing.[2] It will be noticed that the
[177] old designations of some months have been supplanted partially or wholly by names of saints, whose festivals play an important rôle in present-day Tewa life. December is invariably named from *nụp'a* 'Christmas,' and the old name could not be discovered.

---

[1] Final Report, pt. ii, p. 311, 1892.

[2] Zuñi Breadstuff, *The Millstone*, p. 58, April, 1884.

[Text continues on page 67]

(6) Eng. Tewa, from Tewa (1) and Span. (7). Cf. Tewa (1), Jemez (4), Cochiti (5), Span. (7). 101

(7) Span. Tehua, Tegua, etc. Probably from Tewa (1). Cf. Tewa (1), Jemez (4), Cochiti (5), Eng. (6). 192

Some of the names for the Tewa sound much like those for the Tiwa, a fact which is likely to cause confusion. See Tiwa and Non-Tewa.

TEXAN. *Tehanó.* (<Span. Texano 'Texan') The Tewa always regard the Texans as a people distinct from the Americans. Cf. American.

TIWA. (1) *Pʻotsąnnątʻowa*, of obscure etymology (*pʻo*, apparently *pʻo* 'water'; *tsąnnąn* unexplained; *tʻowa* 'people'). Said to be applied properly only to the Isleta and Sandia Indians. No such name as Tiwa is known to the Tewa.

(2) Picuris "Tewö'lnö":[1] given as meaning "Isleta people". Cf. Isleta (3), Jemez (4), Cochiti (5), Sia (6), Eng. (7), Span. (8).

(3) Isleta *Tiwa*, of obscure etymology. This name is applied to the Isleta and Sandia Indians, sometimes also to the Taos and Picuris. Cf. Picuris (2), Jemez (4), Cochiti (5), Sia (6), Eng. (7), Span. (8). *Tiwan* is the plu. No plural sounding like "Ti-guesh" was obtainable. "As for the word Tiguex, the Tiguas [Tiwa] call themselves Ti-guan; but a woman of Isleta . . . plainly pronounced the plural of that name Ti-guesh; 'x' in old Spanish records of New Mexico has the sound 'sh'".[2] The unreliability of this information is apparent. It seems more probable that "Tiguex" comes from the Keresan; see below.

(4) Jemez *Tewátsäʹáʃ*, of obscure etymology (*Tewá* unexplained; *tsäʹáʃ* 'people'). This name is applied to the Isleta and Sandia Indians. Isleta Pueblo [29:101] is called *Tewágiʹ* 'Tiwa place' (*giʹ* locative). Cf. Picuris (2), Isleta (3), Cochiti (5), Sia (6), Eng. (7), Span. (8).

(5) Cochiti *Tíʹwa*, of obscure etymology. Applied to the Isleta and Sandia Indians. Cf. Picuris (2), Isleta (3), Jemez (4), Eng. (7), Span. (8). 'Tiwa place' is called *Tíʹwatsɯ* (*tsɯ* locative), which may be the form of which the "Tiguex" of Coronado, applied to Puaray Pueblo [29:99], is a corruption. 'People of a Tiwa place' are called *Tíʹwatsɯmɯ* (*mɯ* 'people'); Tiwa 'people' is *Tíʹwahánu* (*hánu* 'people').

(6) Sia "Tiwa":[3] given as name of Sandia Pueblo [29:100]. This is doubtless a mistake. Cf. Picuris (2), Isleta (3), Jemez (4), Cochiti (5), Eng. (7), Span. (8). [114]

---

[1] Spinden, Picuris notes, MS., 1910.

[2] Bandelier, Final Report, pt. II, p. 228, note, 1892.

[3] Spinden, Sia notes, MS., 1911.

VII. NAMES OF MINERALS

Alabaster. Bandelier[1] mentions an "alabaster" image of the morning star seen by him at San Juan. He probably mistook some other mineral for alabaster. The Tewa appear to have no name in their language for alabaster. 192 923 [114]

'Ą̨'ą̨sæ̨ 'alkali' ('ą̨ 'alkali' 'salty substance'; *sæ̨* 'burning' to the taste; cf. 'ą̨nʃæ̨ 'salt'). This name is applied also to the mineral obtained at [8:14] and known in New Mexican Span. as tequesquite. The substance is encrusted on the ground about the tequesquite spring [8:14]. It is of a pinkish color and bitter, salty taste. It is used by the Tewa as a purgative medicine, also instead of soda to raise tortillas. It is composed mainly of Na_2So_4 and Na_2CO_3, according to analysis made by the United States Department of Agriculture. [317] [278]

'Ą̨nʃæ̨ 'salt' ('ą̨ 'alkali'; *nʃæ̨* perhaps as in *kunʃæ̨* 'turquoise', q. v.). Salt occurs at [13:35], [18:15], and the Salinas [29:110], q. v. See also myths about salt, pages 229, 536–537.

> The saline deposits of New Mexico are large and have produced salt from time immemorial, the Indians having sought these deposits before the advent of the Spaniards. The oldest and best known salt deposits are those of the big Salt Lake on the Estancia Plains in Torrance County. This lake also has heavy deposits of bloedite, the only place in the United States where this rare mineral has been found. It is a hydrous double sulphate of soda and magnesia. 135
>
> The Salt Lakes of the White Sands in Otero County, the Zuñi Crater Salt Lake in Valencia County, which produces the best salt in the Territory and is in a constant process of formation, having at present a deposit of several million tons, the Salt Lakes in western Socorro County and the Salt Lakes east of the Pecos in Eddy County, are the principal salt producers, although saline flats and salt springs occur in other parts. Thus far, none of this crude salt is refined for commercial purposes, but is used only to salt stock or by the poorer people as a substitute for commercial table salt.[2]

Ƀuwa(jabe)ku 'bread stone' (*ƀuwa* 'bread', *ƀuwajabe* 'paper bread'; *ku* 'stone'). This is a kind of fine-grained sandstone, slabs of which are cut and polished and used for baking *guayave* (Tewa *ƀuwajabe*), the wafer bread of the Indians. This stone is obtained at *Pijoge* [21:2], north of the Black Mesa [1:unlocated], in the upper Chama drainage, and at *Ƀuwakupa'awe* [14:32], upper Chama drainage. The name is applied to the stone both in situ and to the shaped slab. 192 923 [412] [316]

---

[1] Final Report, pt. I, p. 309, 1892.

[2] Land of Sunshine, a Book of Resources of New Mexico, pp. 107-109, 1906.

4: Robbins et al N, E-5 (1910-1911)1916
NT18 Tewa NT18

ETHNOBOTANY OF THE TEWA INDIANS

By Wilfred W. Robbins, John P. Harrington, and Barbara Freire-Marreco[1]

INTRODUCTION

Scope of Ethnobotany

Ethnobotany is virtually a new field of research, a field which, if investigated thoroughly and systematically, will yield results 121 of great value to the ethnologist and incidentally also to the botanist. Ethnobotany is a science, consequently scientific methods of study and investigation must be adopted and adhered to as strictly as in any of the older divisions of scientific work. It is a comparatively easy matter for one to collect plants, to procure their names from the Indians, then to send the plants to a botanist for determination, and ultimately to formulate a list of plants and their accompanying Indian names, with some notes regarding their medicinal and other uses. Ethnobotanical investigation deserves to be taken more seriously: it should yield more information than this; it should strike deeper into the thoughts and life of the people studied. If we are to learn more of primitive peoples, we must attempt to gain from them their conceptions not of a part but of the entire environment. Ethnobotany is a special line of ethnologic investigation, the results of which must receive consideration in our ultimate analysis.

Ethnobotanical research is concerned with several important questions: (a) What are primitive ideas and conceptions of plant life? (b) What are the effects of a given plant environment on the lives, customs, religion, thoughts, and everyday practical affairs of the

---

[1] The earlier, larger, and more systematic part of this memoir is the work of the two authors first named on the title-page, Mr. Wilfred W. Robbins and Mr. John P. Harrington. Their methods of investigation and collaboration are explained in the Introduction. 114

128

When the memoir, in its original scope and form, was in type, it was thought advisable to enlarge it by including notes on some of the economic, industrial, and medicinal uses of the plants, made by the third author, Miss Barbara Freire-Marreco, in the course of work supported by the Research Fellowship fund of Somerville College, Oxford, England, and by the late Miss Mary Ewart's trustees, as well as many additional plant-names. It was thought well also to add, for the sake of comparison, information gained from the Tewa colony settled since the end of the seventeenth century among the Hopi at Hano, Arizona, although the winter season had made it difficult to learn much of the plant environment. Mr. Harrington is not responsible for the form of the Tewa words recorded at Hano, nor Mr. Robbins for the tentative identifications of the plants obtained or described there; Mr. Harrington and Mr. Robbins are alone responsible for the views expressed in pages 1 to 75; and Miss Freire-Marreco for those contained in pages 76 to 118.

4: Robbins et al N, E-5 (1910-1911)1916
NT18 Tewa NT18

ground of raw cotton and held in place by pressure of the glass front. 128
They are particularly useful in that they admit of grouping, under a glass cover in one frame, specimens that are to be associated in the mind of the observer. In each mount should be placed the plant specimen, with portions of products, if any, made from it, and all other material of ethnological interest. This method of exhibiting ethnobotanical specimens is recommended as being the most attractive and instructive, at the same time eliminating the danger of destruction of the exhibited material.

Another method of exhibiting ethnobotanical specimens is to mount them on heavy paper; such paper is specially prepared for the purpose. Each specimen is fastened to a sheet of the mounting paper by narrow strips of gummed paper; gummed Chinese linen paper may be obtained in sheets or in strips cut in varying lengths and widths. A label bearing the data desired is then pasted at one corner of the sheet, when the specimen is ready for exhibition. The content of the label is a matter of some consequence. It should include the scientific name of the plant, the common name, the Indian name with etymology, the locality and the date collected, the name of the collector, and brief mention of special points of interest connected with it.

The ethnologist who is collecting his own material should take 126
pains to collect large specimens with all the parts present if possible in order that the botanist to whom they are sent may readily identify them. The writers have known instances in which plants submitted for classification could not be identified because of insufficient material, or because, if named, the designations were followed by question marks. Although primarily an ethnological subject, ethnobotany does not exclude the necessity for accuracy as regards the botanical part of the work.

PREVIOUS ETHNOBOTANICAL STUDIES

Ethnobotany has received attention from a number of ethnologists, 114
and valuable data have been accumulated. It is desirable that this material be assembled, so that the present state of ethnobotany may be better ascertained; and furthermore, that problems and methods of research may be outlined and work in this field be conducted systematically and with a definite purpose in view.

Harshberger[1] in a paper published in 1896 discussed the purposes of ethnobotany and pointed out the importance of the subject in general. He made the interesting suggestion that ethnobotanical gardens, in which should be grown only aboriginal plants, be established in connection with museums. Havard[2] has written two

---

[1] Harshberger, J. W., Purposes of Ethno-botany, *Botan. Gazette*, xxi, pp. 146-54, 1896.

[2] Havard, V., The Food Plants of the North American Indians, *Bull. Torrey Botan. Club*, xxii, no. 3, pp. 98-123, 1895. Drink Plants of the North American Indians, ibid., xxiii, no. 2, pp. 33-46, 1896.

4: Robbins et al N, E-5 (1910-1911) 1916
NT18 Tewa NT18

114 articles giving valuable accounts of the most important food and drink plants of the North American Indians. Barrows[1] has discussed the ethnobotany of the Coahuilla Indians of southern California, including much information on the general ethnology of the tribe. Chamberlin[2] gives lists of the plant names of the Ute and the Gosiute Indians, including in many instances etymology and uses to which the plants were put. Plants known to have been utilized by the Luiseños of southern California are listed by Sparkman,[3] with their Luiseño, botanical, and English names.

Attention is drawn also to the papers by Powers,[4] Coville,[5] Fewkes,[6] Hough,[7] Matthews,[8] Stevenson,[9] and others.

---

[1] Barrows, David Prescott, The Ethno-botany of the Coahuilla Indians of Southern California, pp. 1-82, Chicago, 1900.

[2] Chamberlin, Ralph V., Some Plant Names of the Ute Indians, *Amer. Anthr.*, n. s., xi, no. 1, 1909. Ethnobotany of the Gosiute Indians, *Memoirs Amer. Anthr. Assoc.*, ii, pt. 5, pp. 331-405, 1911.

[3] Sparkman, Philip Stedman, The Culture of the Luiseño Indians, *Univ. Calif. Pub., Amer. Archæol. and Ethn.*, viii, pp. 187-234, 1908.

[4] Powers, Stephen, Aboriginal Botany, *Proc. Calif. Acad. Sci.*, v, pp. 373-379, 1873-75.

[5] Coville, F. V., Plants Used by the Klamath Indians of Oregon, *Contr. U. S. Nat. Herb.*, v, pp. 87-108, 1897.

[6] Fewkes, J. Walter, A Contribution to Ethnobotany, *Amer. Anthr.*, ix, no. 1, pp. 14-21, 1896.

[7] Hough, Walter, The Hopi in Relation to their Plant Environment, ibid., x, no. 2, pp. 33-44, 1897.

[8] Matthews, Washington, Navajo Names for Plants, *Amer. Nat.*, xx, pp. 767-77, 1886.

[9] Stevenson, Matilda Coxe, Ethnobotany of the Zuñi Indians, *Thirtieth Ann. Rep., Bureau of American Ethnology*, pp. 31-102, 1915.

ROOT

Pu, 'base,' 'buttocks,' 'stem,' 'root.' Thus: *k'ympu*, 'corn root' (*k'yy*, corn plant; *pu*, root). Rootlet is called *pu'e*, 'little root' (*pu*, root; *'e*, diminutive). 24^x

LEAF-SHEATH

K'y'yk'owà, 'leaf-sheath of corn' (*k'y'y*, cornstalk; *k'owà*, tegument, skin, bark).

Tap'ek'owà, 'leaf-sheath of a stalk of grass' (*ta*, grass; *p'e*, stalk; *k'owà*, tegument, skin, bark).

K'owà, 'tegument,' either alone or postpounded, would undoubtedly be the term applied to any leaf-sheath.

WOOD, PITH

P'e, 'stick,' 'stalk,' 'stem,' 'pole,' 'trunk,' 'log,' 'lumber,' 'wood,' 'plant.' *P'e* is used of wood as *palo* and *madera* are used in Spanish, but Spanish *leña* in the sense of 'firewood' is translated *sq*. *P'e* is never used meaning 'firewood.' (Hodge gives as "Firewood or Timber" clan, San Juan and Santa Clara *Pè-tdóa*, San Ildefonso *Petdóa*, Hano *Pè-tówa* (*towà*, people).[1] The rendering of *p'e* in these clan names as "firewood" is incorrect according to the writers' Indian informants.) [114] [614]

P'e is common as the first element of compounds, where it must be rendered by 'wood' or 'wooden' in English. Thus: *p'ekutsandà*, 'wooden spoon' (*p'e*, stick, wood; *kutsandà*, spoon < Spanish *cuchara*).

Green wood is called *p'e 'otfu'iy* (*p'e*, stick, wood; *'otfu*, fresh, green, wet); dry or seasoned wood is called *p'e la'iy* (*p'e*, stick, wood; *la*, dry).

Sq, 'firewood.' This usually consists of dead, fallen, or drifted wood, picked up or torn off; but the same word is applied to trees felled for firewood. See *p'e*.

A Tewa of Santa Clara told the following story: Long ago people had no fire and were trying to find it—who knows how they cooked? [773] Perhaps they ate berries. They made four holes in a row in a slab of *powy* and then they twirled a stick in the holes and out of one of the holes came fire.

A few billets of firewood, carried by means of a cord on a man's [482] shoulder and thrown down beside a woman's door, is considered an [431]

---

[1] F. W. Hodge, Pueblo Indian Clans, *Amer. Anthr.*, IX, p. 350, Oct., 1896.

appropriate present.

PREFACE

THE PRESENT STUDY was made in the village of San 114
Ildefonso, New Mexico, during the summer of 1936, the winter and spring of 1937, and in the course of a final visit in the summer of 1939.

San Ildefonso has within the last century achieved con- 181
siderable notice as the home of famous Indian artists, and the pottery and painting of the people have come in for extravagant praise and unusual publicity. All this has had its effect on the pueblo. In comparison with many other pueblos San Ildefonso is wealthy and sophisticated.

As field conditions play a vital part in determining social 123
investigation, I feel that they should be stated clearly for the 609
reader who must appraise the validity of this material and the conclusions drawn from it. Every ethnologist who has done field work among the pueblo peoples knows how extremely reticent and suspicious they are of all ethnologists. Even today in many of the pueblos a white man is not allowed to spend the night within the village, and the fact that the Indians have guarded their secrets well is obvious to anyone familiar with the people and the literature. And not only is the Indian extremely secretive, but there is also a strong prejudice against ethnology and ethnologists among the staff of the Indian service and among many Anglo-Europeans who are emotionally sympathetic to the Indian and who wish to identify themselves with his salvation.

In 1936 my wife and I rented a house in the North Plaza 123
of San Ildefonso and spent the summer there with our three children. The children played with their Indian neighbors,

· 7 ·

THE SAN ILDEFONSO OF NEW MEXICO

by William Whitman *

INTRODUCTION [1]—EARLY HISTORY

101 The present Tewa pueblo of San Ildefonso or Powhoge,
131 "Where the Water Cuts Down Through," [2] a small pueblo num-
161 bering 128 souls, lies twenty-two miles by road northwest of
Santa Fé, New Mexico.

173 There is a tradition among the people that their original ancestors came from the north near Mesa Verde, and that from there they moved steadily south. In time they came to occupy the villages of Potsuwi and Sankewi and Otowi among the high mesas of the Pajarito plateau. Hewett, in his *Antiquities*,[3] writes:

> The traditions of Otowi are fairly well preserved. It was the oldest village of Powhoge (San Ildefonso) clans of which they have definite traditions at San Ildefonso. They hold in an indefinite way that prior

---

114 128 * Dr. William Whitman died on September 5, 1939. In addition to the fieldwork of which results are recorded in this chapter, he had done extensive ethnological research in other Rio Grande Pueblos and among the southern Siouan tribes. Because of his death, Dr. Whitman was unable to read proof of these pages, and any errors in fact which they may contain, cannot be placed against him.

[1] The following study is a part of the material gathered at San Ildefonso 122 during the summer of 1936 and the winter and spring of 1937, when I was in residence at the pueblo. I wish to acknowledge my indebtedness to the Council for Research in the Social Sciences of Columbia University, whose generosity made this work possible, and to Professor Ruth Benedict of Columbia University, whose insight and understanding of the Southwest have done much to influence the approach with which this work was carried out. I also wish to thank Mr. Kenneth [illegible]. Chapman of the Laboratory of Anthropology, Santa Fé, New Mexico, and my wife, for their assistance in the preparation of this paper.

[2] J. P. Harrington, *Ethnogeography*, p. 303.

[3] E. L. Hewett, *Antiquities*, p. 20.

173 could be averted by abandoning their plaza of misfortune and moving
578 back to the south. I heartily concurred. They began the building of the
new houses to the south, forming a new plaza around the ancient kiva
361 that was now restored. Another large kiva was built to take the place of
751 the one in the plaza that was being abandoned. In time the greater part of the community was shifted to the new south plaza and all ceremonials transferred to the new precinct. The results were up to the most fervent expectations. They point with pride to the large number of healthy children free from epidemics, and the slowing down of tuberculosis. My hopes were based largely upon improvement and morale and sanitation, and theirs upon the efficacy of a tradition. Between us we struck the remedy. Perhaps the visiting nurse deserves part of the credit.

[114] The outcome of the move, however, has been far less successful than Dr. Hewett anticipated.

When the cacique, Ignacio Aguilar, and the then presiding gov-
175 ernor, Juan Gonzales, suggested that the pueblo abandon the
361 North Plaza and move south, by far the greater part of the land
578 in the present South Plaza belonged to them. Ignacio and Juan
621 moved and built themselves houses, and, according to Juan, of-
556 fered building sites to any villagers who would follow them. The relatives of the two leaders went over as well as a few other families who were ceremonially allied to them. But not all of the villagers wished to leave their houses in the North Plaza. Numerically this group was in the majority, and they decided to stay where they were. Moreover, it included the most successful women potters, and the three remaining Winter families.[78]

For some time pottery had been bringing the pueblo wealth and recognition. N. and her two sisters as well as C. S. (all belonging to the North Plaza group) had grown increasingly wealthy and increasingly powerful in village affairs. N. in particular was well qualified by determination and character to influence not only the women of the village, but also the men. The N. sisters and their husbands formed a powerful group. They were famous and they were wealthy and they resented the authority of the cacique. From temporal affairs their influence spread into religion.[79] T., husband of N., and head of one medi-

---

[78] The Winter families were nearly exterminated by the influenza epidemic of 1918.

[79] E. C. Parsons in *Social Organization of the Tewa of New Mexico*, p. 108,

511 high now, we can expect this change to be reflected in the data derived from our study of the population.

Following is a statistical summary of the population, land, and in-
161 come of the San Juan Indians in 1938:[3]

311

Population	589
Irrigable farm land	2,000 acres
Forest and open grazing land	10,175 acres

Statement of income

434

Farm crops	$5,709
Livestock and prod.	1,495
Outside labor	26,808
Arts and crafts	1,801
Other native industries	412
Direct relief	385
Total	$36,610
Average income per capita	$62.16
Average income per family[4]	$279.47

2. POPULATION

A. Trends of total population

The general curve of population change for the San Juan Pueblo
161 (Fig. 1) was plotted from the data found in the four supplementary sources discussed in the preface. The various figures from Table 1 are shown as points, and a smooth curve has been drawn through them to give a general picture of the population trends.

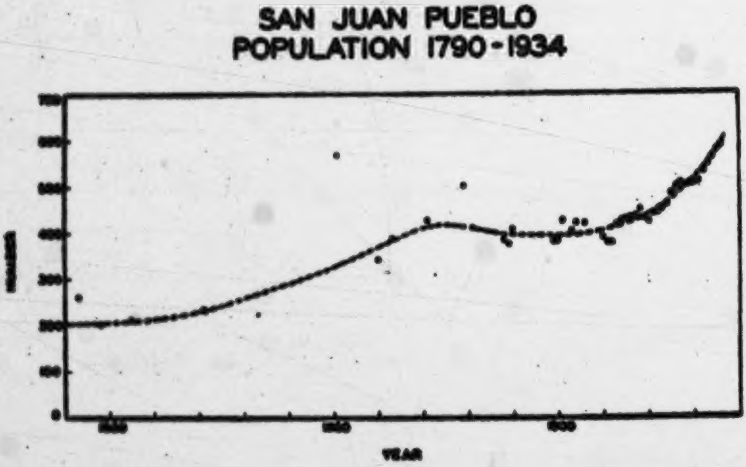
The inconsistencies to be found in the table and chart show that
114 our information possesses varying degrees of validity. Of the two
161 earliest population figures, the first listed in the table, 300 in 1680, is probably nearer the truth than the 400 given for 1707. The latter appears to include the Spanish population, and is less authentic than Bonilla's[5] figures for 1749, in which he differentiates between the Indians and the Spanish. Bonilla's total population is also more compatible with other independent estimates made at about the same time. Bancroft quotes without pertinent comment the figure 316 from Tamaron's report of his *visita* in 1760.

---

[3] Annual Statistical Report, United Pueblos Agency, December 31, 1938.

[4] Calculated on the basis of 131 resident families.

[5] The sources referred to in this section are listed in column 4 of Table 1.


SAN JUAN PUEBLO
POPULATION 1790-1934

114
161

Figure 1

The earliest population figure for the pueblo in which any real reliance can be placed is that for 1790. The census for that year was thoroughly and carefully done, as was shown by an inspection of the original in the Santa Fe Archives. Each family was listed by the name and race of the man and wife, or other family head, together with the relationship of the other members to the head, as well as the age of each. The total amounted to 203 residents for the pueblo. The figure given by Bancroft for 1793 was higher, but for 1799, 202, is more in line with the 1790 figure. Considering that the epidemic of 1781 took a toll of over 100 lives, it would seem that Tamaron's figure of 316 for the year 1760 was substantially correct.

The report of 1805 and that of 1821 were cited as being the only exact sources for this period. The data for 1808 and 1809 were taken from a report made by John Ward, Indian Agent in 1867, and compare closely with the total for 1805.

In 1851, James S. Calhoun sent a census report to Washington in which he gave the figure 568 for San Juan. This seems high, and Calhoun himself throws doubt on the validity of the census. The Pojoaque, Tesuque, and Nambe Pueblos were demonstrated to have been underenumerated by approximately the same amount as that which seems to be in excess at San Juan.

Subsequent census reports are to be found in the annual reports of 114
the various Indian Service Superintendents. Although an Indian census was required of them each year, lack of interest, personnel, and funds 161
caused guesses to be made more often than a thorough count. The population counts between 1863 and 1910 that are cited in Table 1 are those in which clear evidence was given in the report that a census was made; after 1911, annual figures are given.

The statistics gathered for the federal census of 1890 were carefully checked with those persons who had knowledge gained through residence in the area. As this was supplemented with conferences with the leaders of the Indians, the report represents the consensus of many opinions.

Following the thorough census of 1936, the results were checked in every way possible and were finally certified as correct by the Council of the Pueblo.

A test was applied to the most recent census of the San Juan Pueblo to determine its accuracy. The population change from census to census was taken over the period 1926-36, the increase amounting to 95 persons. The excess of births over deaths computed for the same time span was 92. The difference of three is annually less than a thousandth of the mean population for the period.

It can be seen that the population curve has been constructed from a variety of sources. Undoubtedly errors exist in individual censuses, even in those culled for use here. However, the general trends in the change of population have been made evident. There was apparently a decrease of about 100 in the latter half of the 18th century, so that around 1800 the population was approximately 200 persons. By 1860, it had risen to twice this number, and after levelling off, it has risen consistently since 1910 to the value of 586 in 1936. The present population is thus almost a 200 percent increase over the population in 1800, and a 46 percent increase over that of twenty-five years ago. Since 1910 the population increment, computed by the method of least squares, has been at the rate of 1.53 percent per year.

It has been impossible to determine accurately the trend of the Span- 000
ish population within the study area with the information available because the bounds of this area are not contiguous with those of the parish to which the records were often confined. Futhermore, the parish boundaries have undergone occasional change. The totals that follow are presented only as approximations of the number of Spanish persons within the study area. The figures listed for the first four dates were

TABLE 13

Mean years to death, by broad age groups, of the identified portions of the 1790 Franciscan Census 165

[162]

AGE	PUEBLO No.	PUEBLO Mean Age at Census	PUEBLO Mean Years to Death	Spanish No.	Spanish Mean Age at Census	Spanish Mean Years to Death	OUTSIDE PUEBLO Indian & Mixed No.	OUTSIDE PUEBLO Indian & Mixed Mean Age at Census	OUTSIDE PUEBLO Indian & Mixed Mean Years to Death	Total No.	Total Mean Age at Census	Total Mean Years to Death
20-29	16	23.9	22.5	32	24.6	30.2	19	24.1	25.7	51	24.4	28.5
30-39	14	34.1	15.6	16	34.6	16.1	13	34.6	18.9	29	34.6	17.3
40-49	17	43.4	15.8	27	44.2	19.7	15	43.2	18.7	42	43.9	19.3
50-59	2	55.0	13.0	22	54.6	15.9	1	50.0	19.0	23	54.4	16.0
60-69	6	66.2	6.7	3	63.7	6.0	2	61.0	11.5	5	62.6	8.2
70-79	3	70.7	4.3	3	71.3	6.0	0	......	......	3	71.3	6.0
80-89	1	87.0	5.0	1	83.0	3.0	1	80.0	2.0	2	81.5	2.5
Total	59			104			51			155		

The expectations of life given for Rome and Roman Egypt, about 2,000 years ago, are the only values given which approximate that of 22.5 years for the pueblo. No modern life table, not even the one for Breslau, Germany, in 1687-1691, gives as low an expectation at the age of 25 as that for the pueblo; the Breslau figure is similar to our own value for the Spanish area. The table also shows that life expectancy at the age of 25 changes slowly, as it increased only a few years in the United States during a thirty-year period which brought extensive environmental improvements and applications of preventive medicine. Therefore, the difference between the causal factors of mortality in the Southwest about 1800 and those of the United States today must be very great.

171
165
[177]

E. Mortality in recent years

For the study of mortality in San Juan Pueblo in recent years we are limited to the annual tabulations of the total number of deaths by age, since statements describing the cause of death are too incomplete to be acceptable, and the small numbers preclude subdivision by sex.

165
[114]

FREQUENCY OF PREGNANCIES AND BIRTH INTERVAL AMONG PUEBLO INDIANS[1]

S. B. D. ABERLE

Institute of Human Relations and Department of Obstetrics and Gynecology, Yale University

ONE CHART

Certain notions regarding primitive people have crept into the literature and have remained because of the difficulty of obtaining evidence for or against their validity. Such is the assumption, which is supported by many writers, that primitive people do not produce many children. Thus, Doctor Holder says, speaking of the Crow tribe, ". . . . it is evident to anyone acquainted with this race that the birth rate is abnormally low." Bancroft reports of the Nootka tribe: "Women rarely have more than two or three children." Of the Chinooks: "Barrenness is common, the birth of twins rare, and families do not usually exceed two children." Catlin says: "It is a very rare occurrence for an Indian woman to be 'blessed' with more than four or five children during her life; and, generally speaking, they seem contented with two or three. . . ." The Thirteenth Census of the United States gives an average of 4.5 children per woman among full-blood Indians. The view regarding the low fecundity among primitive people led Carr-Saunders to conclude in his study of "The Population Problem" that fecundity has increased with civilization. 114 121

In order to test these assumptions and obtain data on the modal fertility in a group of women with unlimited reproduc- 121

---

[1] This investigation was carried out under the sponsorship of Dr. Clark Wissler, and the field work was partially subsidized by a grant from the National Research Council Committee for Research in Problems of Sex. [122]

AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY, VOL. XVI, NO. 1
JULY–SEPTEMBER, 1931

105 The women earn some money from their native industries,
of which the chief is pottery making. The Santa Clara
women earn more than the people at San Juan because they
are on the main tourist route and have a good market for their
wares. The Indians raise their own corn, wheat, and chili,
which form the basis of their diet. In both pueblos the
amount of land cultivated is small, not quite 2 acres per
capita, and their crops are not adequate to last throughout
the year. The average family income is $256 at San Juan
and $352 at Santa Clara, calculated from the annual returns
from livestock, outside labor, native industries, and agriculture.
The income estimated for San Juan by some of the
merchants in the vicinity, figured on the yearly purchases
of the Indians, was between $200 and $300 a year. It is a
very difficult figure to find, since the Indians themselves have
no idea of the amount of their own earnings. No Indian was
found in the pueblo of San Juan who had a bank account.
Although these Indians are a great deal better off than many
[511] of the people seen in the free medical dispensaries of large
cities, the standard of living is not high. The amount of food
[146] they consume would not be considered wholly sufficient
according to the present-day conception of an adequate diet.

125 The material for the present study was collected from two
sources: first, from records kept by the parish priests in
127 the vicinity of the pueblos, in order to get the names and
dates of all the children that were christened; secondly, from
house-to-house visitations of the parents, in order to get the
pregnancies which did not result in viable young which lived
[177 to be christened. All legitimate as well as illegitimate children
795 are christened by the Church and the ceremony usually
occurs within five days, rarely over ten days, after birth.
[852] In instances where the parents were known, birth records
were found without difficulty, indicating that the records had
been faithfully kept.

● 114 Birth records from San Juan were collected for the periods
129 1799 to 1837 and 1892 to 1930. From December 25, 1823,
until June 29, 1829, the entries of the christenings did not

regularly include the parents' residence. Without that, it 114 was not always possible to tell whether they were Indians or Mexicans. Consequently, the Indian names were collected 127 prior and subsequent to that period, and when in doubt only those births were taken where the names were similar to the names on the list of known Indian families. Each entry was checked and the material arranged in families.

The parish birth records from 1892 to 1930 were recorded 125 and checked; the families which were alive in San Juan dur- 127 ing the summer of 1930 were made into a separate file. Each one of these families was visited and questioned regarding the number of offspring they had borne, with special emphasis on the abortions, children that had been born dead or had died before christening. For Santa Clara, the method employed was essentially the same. The dates of the births were collected from the parish records and a questionnaire made of the individual families.

The families used in this study were carefully chosen from 125 those that were interviewed. If the total number of christened children given by the mother agreed with the number collected from the parish records, the abortions and stillborn infants were included and that family used in the study. If, however, a woman could not remember the total number of her christened children, it was assumed that she would not be able to remember the number of her abortions and stillbirths, so such families were omitted from the study. If the [124] number of children given as the total by an Indian woman did not tally with the births which had been recorded for her in the parish books, and it was obvious that she was doing her best to remember, she would be assisted by the records. When a woman gave figures that were at great variance with the parish data, and it was felt that she was purposely trying to misrepresent the facts, she was excluded without further discussion. Nearly all of the women who had passed the re- 114 productive a[illegible]uld not remember the number of offspring 115 they had bor[illegible]nd most of the middle-aged women did not have a clear idea of the number or the sequence of their preg-

114 nancies. The proper sequence was necessary in order to place
115 the stillborn infants and abortions between their proper sibs whose birth dates were known. The records from the parish
[127] were essential in this study. It would have been impossible to obtain any reliable information if one had to depend only upon the confused and vague memories of the Indian women.

125 No families were used where one or both of the parents were considered Mexican and on that basis excluded from the Government census. No families were used where it was known that the husband had been away from home for several consecutive years, or where the woman had been married more than once, unless the dates of the deaths of the husbands and subsequent marriages could be obtained. Some small families of one or two children, and families where the parish records were not complete because the family had been away for a period of years, were omitted.

842 Twenty representative informants were unanimous in saying that no contraceptive measures were used by the women of these pueblos. The older people are eager for the younger women to have as many children as possible. The younger women seem to want offspring and take great pride in their babies. Hrdlička, to whom we owe the first systematic inquiry into this subject among the Indians, noted a general desire for children on the part of the Indian women.

163 Twenty-eight complete years, for the periods 1800 until 1820 and 1829 until 1837, show 340 registered births in the pueblo of San Juan. Of these, 179 were males, 160 were females, and 1 whose sex was unknown (table 2). For twenty-eight years at the beginning of the twentieth century, from 1902 until 1930, the number of recorded births was 573, of which 270 were males, 302 were females, and 1 whose sex was unknown. Figures where the San Juan parish records had been corrected by a questionnaire of the parents show a total of 644 births for eighty-four women, of which 313 were males, 312 females, and 19 whose sex was not known. Of this group, there were thirty-two miscarriages, or about five out of every one hundred births. There were ten stillbirths, which makes 1.5 per cent stillborn out of every hundred births.

161 twenty, respectively. Assuming that the recorded births are
163 an index of the population, one would expect the number of people in San Juan in the nineteenth century to have been twelve-twentieths of what it is to-day, or twelve-twentieths of 504, which equals 302. This would agree with the known facts, and the birth records of a hundred years ago would seem to be as accurate as they are to-day.

No families were excluded because of venereal disease.
164 Wassermanns had been taken on a few people of San Juan in 1924 and 1928. Table 3 shows the number of specimens collected and the result of the examinations. Because of the
[114] difficulty of obtaining blood from the Indians for the test, few examinations were made. In 1929 there was supposed to be a new infection introduced into the pueblo. Only individuals suspected of having lues were examined and for that reason the number of positive tests was high. It is well known that lues produces abortions, miscarriages, and stillbirths. The percentage of accidents to pregnancy among the Indian women was lower than figures quoted by Jeans for a group of non-luetic women. Jeans found in an analysis of
114 200 families showing no obvious signs of syphilis that out of
163 886 pregnancies, 9.9 per cent of them were stillborn, abor-
164 tions, or miscarriages. In this group of 644 pregnancies there were forty-two, 6.5 per cent, accidents to pregnancy. This suggests that syphilis was not an important factor in its effect upon childbirth in this group.

TABLE 3

Lues among Pueblo Indians

	Total specimens examined	*Positive Wassermanns*	*Per cent of positive Wassermanns*
Survey, 1923–1924, including several pueblos,	428	43	10.0
San Juan, 1923–1924,	38	3	7.89
San Juan, 1929,	30[a]	14	

[a] Only examined individuals showing some clinical symptoms of lues.

114 In calculating the intervals between births, only those
163 births which could be obtained from the parish records and

erified by the parents were used. In instances where one 114
hild had died before being christened, the interval between 163
hat and the preceding birth was not used, because in no case
ould the mother remember the month or even the year of
irth. No children born more than a few months prior to
narriage, nor children marked illegitimate on the records,
vere included in this study, because the number of preg-
ancies a woman had prior to marriage might depend upon
actors other than her innate capacity to reproduce. The
irths that occurred before marriage might be further apart
han if the woman were living a settled married life.

Chart 1 shows the frequency of occurrence of various inter- 128
als between births of children born in wedlock. Table 4
ives the data from which the curves were drawn. Length 163
f interval is indicated along the base line and frequency of
ccurrence on the ordinate. The births collected for the
omen who had children from 1799 to 1837 were arranged
nto families, and the intervals between births were figured
nd charted and are shown as the dotted line on the chart.
hey represent a total of 222 instances. The range is about
ighteen years, with 85 per cent of instances falling within
889 days. The intervals between births from 1892 until 114
930, representing data which were not corrected by the
amilies of San Juan, either because the parents were dead
r had forgotten their pregnancies, are shown by a solid line
n chart 1. They represent a total of 191 instances. The
ange is about eight years, with 91 per cent of instances
ithin 1889 days. The intervals between births for the data
orrected by the Indian women are shown as a broken line.
here are 407 instances in these data. The range is ten
ears, with 98 per cent of the instances within 1889 days.
he births include seventy-eight families—twenty-five fam-
lies living in Santa Clara and fifty-three families in San
uan. The interval is the same as found by de Aberle in a
reliminary study in 1928.

The contrast between the solid black line and the broken
ine in chart 1 represents the difference between the corrected

March and Davenport found the modal interval between 171
births for the Gorton family in New York and Ohio for the 163
years 1700 to 1850 to be twenty-four months. An analysis of the modal interval between births based upon 1,714,261 children born of 1,696,217 women in the registration area of the United States in 1921 was found to be also twenty-four months. This was for families of less than seven children; for families of seven or more children the interval decreased in length, due in part to the inclusion of both children of a plural birth, twins being more common in large families. The modal interval between births is a measure of the reproductive capacity of a group, but would not necessarily determine the size of the family. Family size would depend on social and economic factors.

Among the Indians, the Colonial women, and the European 171
women of the seventeenth century, children were probably 842
considered an asset. The Indians have no way of saving for an old age, and as the young people take care of their aged parents, a large family is the only investment for the future. The Gorton family was among the early settlers of the country, and the conditions associated with pioneer life would encourage the women to bear children, so as to supply all of the assistance possible in developing the raw lands. During the seventeenth century, under absolute governments with mercantile policies, there was need for a large number of men in the army, in manning the ships of war, and in agriculture. Unrestricted reproduction was probably the rule in all of these communities.

The data suggest that the fertility of the white woman has 114
remained the same for the last 300 years. The changing liv- 163
ing and economic conditions have not affected her fertility, nor has the Indian woman's more intimate contact with white culture during the last century, with the changes it has brought in diet, in living conditions, or in habits, had any influence on her fertility. In neither instance has fecundity increased with civilization.

pueblo simultaneously with the bettering of the living 161
conditions.

Boas ('94) states that the average number of children for
577 Indian women was found to be 5.9. Hrdlička, in his 114
survey of the Indians of the southwestern United States and 163
northern Mexico, collected detailed family data, especially on 165
the Apache and the Pima, two tribes of different physical 171
type. Thirty-seven full-blood Apache women, who had
passed the child-bearing period, had the average of 6.97;
thirty-five similar Pima women, the average of 7.03 living
children born to them, but many of the children died. Hrd-
lička came to the conclusion that the birth rate among the
Indians studied "is usually high, but as the mortality also is
high, large families are uncommon." This has been found to
be true in the present study. Beside the high infant mor- [591]
tality, the custom among the Indians of giving their children
to friends and relatives to raise when the family becomes
large tends to prevent many children living together under
one roof, even in the exceptional families where a large num-
ber of children have survived.

CONCLUSION

Women living in the pueblos of San Juan and Santa Clara 163
in 1930 were found to have between nine and fourteen preg- 171
nancies during their reproduction span, showing there is no
lack of fecundity among this group.

The modal interval between births was found to be approximately twenty-four months for Indian women living to-day, for Indian women living a century ago, for white women of the registration area of the United States in 1921, and for Colonial women living a century ago. The birth rate among the Indians of to-day was approximately the same as that for the population of Copenhagen in the seventeenth century. It is significant that among five widely separated groups of women, living under totally different environmental and cultural conditions, the reproductive capacity should have been the same. It would seem that fertility was dependent upon something intrinsic in the human organism itself, rather than upon culture or environment.

CHILD MORTALITY AMONG PUEBLO INDIANS[1]

S. B. D. ABERLE
Institute of Human Relations and Department of Obstetrics and Gynecology, Yale University School of Medicine

There is but little information on child mortality among those primitive cultural groups where obstetrical practices and infant care are determined largely by tribal customs. Such customs are often in direct contradiction to what has been shown through experimentation to be of advantage to the health of the offspring. In order to determine the death rate among children reared in a community under fairly primitive conditions the following study was undertaken. 121

The material was collected from two Tanoan pueblos in New Mexico. Deaths of infants are not always recorded by the Church and records have been kept by the Board of Health for these communities only since 1921. Hence, it was not possible to collect adequate information from available records. The study made was confined, therefore, to children in families where the mother was living and the information could be obtained directly. The material for the study on infant deaths is that obtained by observation of the children of forty-three San Juan and nineteen Santa Clara families; the figures for the child mortality rates include fifty-two San Juan and twenty Santa Clara families. [114] 125

It is well known that carefully conducted deliveries lessen the chance of infant deaths. In the community where this study was made the deliveries are conducted by midwives 844

---

[1] This investigation was partially subsidized by a grant from the Committee for Research in Problems of Sex, Division of Medical Sciences, National Research Council. The writer is indebted to Mr. Nusbaum, Director of the Laboratory of Anthropology at Santa Fe, for assistance in the field. [122]

AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY, VOL. XVI, NO. 3
JANUARY–MARCH, 1932

under five years of age. These figures included fifty-two San 125
Juan and twenty Santa Clara families. No children born 163
subsequent to October 1, 1925, were used, and no deaths that 165
occurred later than October 1, 1930, were included. No miscarriages or stillbirths were included when calculating the mortality rates.

The mortality rates for Indian infants and children can 114
only be taken as approximate, owing to the small number of
instances, the imperfect reports as to the exact time of death, 165
and the bunching at preferred dates (especially six months and one year). Figures obtained from communities where no records are in existence must necessarily depend upon getting the material from individuals, and since this method can only be used when an intimate acquaintance with the people has been established, it would be almost impossible to obtain sufficient instances to have them statistically reliable.

The mortality rates in these studies were arrived at by 125
comparing the number of infants born in the selected families
with the number of deaths that occurred under one year and 165
under five years of age among children of these families and are independent of change in the birth rate. The deaths that occurred in a group within a given time interval are divided by the number of infants in the group living at the beginning of that interval, and that figure multiplied by 1000, thus giving true mortality rates in contradistinction to the customary infant mortality rates.

Throughout the study, the mortality rates for the Indians 114
under one year of age are compared with similar rates com- 165
piled by Woodbury for white and negro infants. Woodbury 171
has figured mortality rates upon the deaths occurring among infants in the following cities: Johnstown, Pennsylvania; Manchester, New Hampshire; Saginaw, Michigan; Brockton, Massachusetts; New Bedford, Massachusetts; Waterbury, Connecticut; Akron, Ohio, and Baltimore, Maryland. These figures more closely resemble ours than do those obtained by the usual method of basing mortality rates on the calendar births and deaths of a certain area for a special time. The

9: Aberle D-5 (1930) 1932 NT18 Tewa NT18

9

114 pueblo Indian families, living as they do in one or two rooms in a small, congested community, resemble in some respects 165 both urban and rural population. During the night they are 171 as crowded as are people in the tenements, but during the day most of their time is spent outdoors.

165 TABLE 1

171 *Male and female monthly death rate per 1000 by months of life and color (exclusive of stillbirths)*

	TOTAL INDIAN[1] INFANTS LIVING AT BEGINNING	TOTAL INDIAN[1] INFANTS DEAD DURING	MONTHLY DEATH RATES		
			Indian[1]	White[2]	Colored[2]
First month	442	35	79.2	43.4	64.5
Second month	407	7	17.2	9.2	11.0
Third month	400	2	5.0	8.0	8.2
Fourth month	398	4	10.1	7.5	16.5
Fifth month	394	1	2.5	7.4	12.2
Sixth month	393	11	28.0	7.0	12.3
Seventh month	382	2	5.2	6.1	8.6
Eighth month	380	2	5.3	5.7	7.1
Ninth month	378	3	7.9	5.7	5.5
Tenth month	375	3	8.0	5.1	7.2
Eleventh month	372	6	16.1	3.8	5.6
Twelfth month	366	25	68.3	4.4	6.5
Total live births	442			21,510	1457
Total infant deaths		101		2,330	225
Infant mortality rates			228.5	108.3	154.4
Death rate:					
Months 2 to 6			61.4		
Months 7 to 12			107.3		

[1] Pueblo Indians of San Juan and Santa Clara.

[2] Woodbury, op. cit., p. 215.

The Indian mortality rates for months of the first year of life are compared to those for white and colored infants in table 1. The Indian mortality rate for the first year (228.5) is over twice that for white infants (108.3) and notably higher than that for colored infants (154.4). The Indian infant mortality rate shown in table 2, which includes a larger number of families than table 1, is even higher (246.7). The Indian mortality rates might have been somewhat higher had it been possible to include the offspring of women who had died.

Woodbury found that the mortality rates among white infants whose mothers died during the first year of life were more than four times as high as those for babies where mothers lived for a year or more after giving birth. 165 171

The Indian mortality rates for months of life for the first year can be taken as an indication of the conditions existing for the last forty-six years (table 1). The Indian mortality rates for the first month, which are higher than those for white or colored infants, suggest that lack of proper care during childbirth and lack of cleanliness may be contributory causes. [854] The rates for the second, third, fourth, and fifth months are probably lower than they would be were it not for the universal custom among Indian women of nursing their young. 165 171 853 Woodbury found that the mortality rates among breast-fed infants in the early months of life were much less than those for artificially fed infants. If the Indian mother does not have sufficient milk, a friend or relative who is lactating will assist in nursing the child. If no one is available, the child dies. [477] Only recently have government nurses taught the Indians how to prepare milk for their children and urged the keeping of dairy cows. The abrupt rise 165 114

TABLE 2

Male and female deaths from all causes (exclusive of stillbirths). Mortality per 1000

YEARS	TOTAL INDIAN[1] CHILDREN LIVING AT BEGINNING OF	TOTAL INDIAN[1] CHILDREN DEAD DURING	MORTALITY RATES		
			Indian[1]	Korean[2]	Original registration states[3]
0–1	450	111	246.7	180	114.62
1–2	339	42	123.9	127	27.62
2–3	297	18	60.6[4]	102	12.34
3–4	279	2	7.2	59	7.83
4–5	277	8	28.9	39	5.65

[1] Pueblo Indians of San Juan and Santa Clara.

[2] J. D. Vanbuskirk and R. G. Mills, op. cit., p. 7.

[3] United States Life Tables, 1890, 1901, 1910, and 1901–1910. Dept. of Commerce, Census Bur., Govt. Ptg. Off., Washington, p. 54.

[4] The irregularity in the mortality rates for Indian children for the third, fourth, and fifth years is probably due to the small number of instances.

114
165 in the mortality rates at six months and a year are partly accounted for by the habit of giving unknown figures in round numbers. There are probably too many entries for six months and one year and too few for the intervening months. However, the great number of deaths around six months may also reflect the effect of improper feeding at the time the infant starts taking solid food. Mortality rates for colored infants, where improper feeding would undoubtedly play a rôle in the death rates, show a marked increase during the fourth, fifth, and six months.

165
171 Table 1 shows the average monthly death rate for Indian infants for months 2 to 6 to be 61.4, and from 7 to 12, inclusive, to be 107.3. Half of the mortality rate for the twelfth month (68.3) may belong above one year and half may belong below. If this be true, there may not actually be an increasing death rate after the first few days of life. However, the fact that the figures for the Indian infant mortality rates up to the eleventh month rise and fall in a general way as do the figures for the colored infant mortality, suggests that similar factors are operating in each group and that the figures probably are fairly representative.

The true mortality rates for Indian and Korean children under five years of age are shown in table 2 in comparison with child mortality in the original registration states as given in the life tables for both sexes, 1910. It can be seen that the Indian mortality under one year (246.7) is higher than for Korean infants (180) or for children of the registration area of the United States (114.6). The Indian mortality rate for the second year (123.9) is over four times as high as that for other children living in the United States (27.6), but somewhat less than for Korean children (127). For the third, fourth, and fifth years the Indian mortality rate is consistently less than that for Korean children, but the rates for the third and fifth years are notably higher than the rate for other children in the United States.

127
165 The causes of death, as taken from the original death certificates of the Board of Public Health in Santa Fe of four

10: Aberle D-5 (1930-1932) 1934

NT18 Tewa NT18

Zuni NT23

T

Pregnancy Z

is freely discussed in the group and the prospect of another baby in the family is anticipated with pleasure. 842

Births are attended by a certain amount of ceremony which differs somewhat in the various villages (Parsons[3, 4]). Older experienced women recognized as midwives officiate. When complications occur the Shaman is summoned. Women do not stop their household labors until birth pains begin. Then the midwives, friends, and relatives may be summoned into the one- or two-room adobe building and sit around waiting for the event. The pregnant woman lies or reclines fully dressed on a mattress on the floor. The bedding consists of used blankets and comforts. Sheets are not a part of the household equipment of the average Pueblo Indian woman. She delivers with her clothes on. No precautions of any kind are taken to insure sterilization. Custom forbids her taking a bath for several days after the baby is born. T Z 844

Although the figures from these five Indian villages are small, they are more accurate than they would have been if all the villages had been included, regardless of the completeness of the medical records kept in them. If anything, the figures and rates are too low. Among the Pueblo Indians the number of deaths due to epidemic, endemic, and infectious diseases and diseases of the respiratory system is 627.2 per 100,000, while among the population of the United States registration area it is 164.5 per 100,000. Diseases of the digestive system are twice as high for the Indian group, while deaths due to the puerperal state are over seven times as great as those for the population of the United States. Each rate would have been higher had it been possible to put the deaths assigned to unknown causes under the correct classification. But the outstanding fact is that, even though the rates can be taken only as an approximation, deaths due to the puerperal state are notably higher than those of the population at large in the United States. T Z 114 164 165

---

[3] Parsons, E. C., 1919. Mothers and children at Zuni. Man, XIX, no. 11, 86.

[4] Parsons, E. C., 1924. Tewa mothers and children. Man, XXIV, no. 10, 112.

T
Z
165
847

The mortality rates among the Pueblo Indians, however, are not strictly comparable to those among white people because of outstanding differences in the two groups. Criminal or self-induced abortions are an important cause of puerperal infection among white women. Abortions are, as far as it is possible to ascertain, not produced among married Indian women. Children are an asset rather than a liability in a community that depends for its livelihood upon the cultivation of the land, and in which the entire cost of an education is borne by the government.

T
Z
163

Again, practically every Indian woman who is physically able to reproduce has children. Families are larger on the average than among white women. The mean number of pregnancies for each woman from a group of San Juan and Santa Clara Indians was found to be 9.4.[5] The modal interval between births is 24 months. The high proportion of women bearing children and the greater number of pregnancies for each woman would both tend to increase the number of accidents due to pregnancy for each individual.

●T
Z
●114
147
844

Hrdlička,[6] on the basis of careful observations, said that the healthy Indian woman of normal physique, with a normal child, on the average suffers quite as much and as long as does the normal white woman under similar conditions.

T
Z
165
171

On the other hand figures analyzed by Sterling[7] show that labor is no more difficult among Indians than among the population at large. She studied a group of 1815 pregnancies occurring in full and mixed-blood Indian women whose deliveries took place in the Indian Service hospitals. She found that pregnancy failure had little or no relation to the proportion of blood of the Indian women. The maternal mortality rate compared favorably with the rest of the country as a

---

[5] Aberle, S. B. D., 1931. Frequency of pregnancy and birth interval among Pueblos Indians. Am. J. Phys. Anthrop., XVI, 63–80.

[6] Hrdlička, Aleš, 1908. Physiological and medical observations among Indians of southwestern United States and northern Mexico. Bureau of Am. Ethnology. Bull. 34.

[7] Sterling, E. Blanche, 1933. Maternal, fetal and neonatal mortality among 1815 hospitalized American Indians. Public Health Reports, 48, no. 20, 522–535.

Zuni NT23

T
2
165
171

whole. The high maternal mortality among the Pueblo Indians must be due, therefore, to their lack of knowledge regarding the conduct of deliveries.

The total recorded deaths for these five villages over the same period for men and women were 652. This gave a rate of 27.8 as compared to a rate of 11.9 per 1000 population in the registration area of the United States.[1]

The child mortality among this group is high.[8] The infant mortality in San Juan and Santa Clara was found to be about twice as high as that for white infants and one and a half times as high as that for colored infants.

T
2
161
163

In spite of a high maternal and child mortality, the population among the Indians at San Juan where this point was investigated was found to be on the increase by virtue of a high birth rate.

Hrdlička in 1908 pointed out the excess of males among the relatively peaceful Rio Grande Pueblos.[4] In a community having a high maternal mortality and no concomitant male mortality, a shift in the sex ratio would be inevitable.

CONCLUSIONS

T●
2
114●
165

The death rate among Pueblo Indian women who died from causes attributed to pregnancy or parturition is much greater than the rate found among women in the registration area of the United States. This figure would have been higher had it been possible to include those deaths which were not attended by a physician. The available figures indicate that childbirth among the more primitive peoples is not a relatively simple and safe event for the mother.[9]

---

[8] Aberle, S. B. D., 1932. Child mortality among Pueblo Indians. Am. J. Phys. Anthrop., XVI, 339-349.

[9] This investigation was subsidized by a grant from the Carnegie Corporation. The writer wishes to express her thanks to Dr. J. H. Watkins, Department of Public Health, Yale University School of Medicine, for his advice and help in compiling the mortality rates.

T
2
[122]

11: Freire-Marreco E-5 (1913) 1914
NT18 Tewa NT18
Hano

TEWA KINSHIP TERMS FROM THE PUEBLO OF HANO, ARIZONA

By BARBARA FREIRE-MARRECO

Late Research Fellow and Mary-Ewart Scholar of Somerville College, Oxford, England; student attached to the School of American Archaeology, Santa Fe, New Mexico.

INTRODUCTION

THE information presented in this paper was obtained during 114
a visit to the Tewa village of Hano on the First Mesa of the Moqui reservation, Arizona, in January, February, March, and April, 1913. The visit was made at the expense of the Research 122
Fund of Somerville College and of the Ewart Trust, and was facilitated by the generous help and advice of the Director and staff of the School of American Archæology, and particularly of Mr J. P. Harrington. I have also to thank Mr Drummond, U. S. Indian 600
Superintendent at Polacca, for practical help and kindness, and Miss Rodger, field-matron at Polacca, for valuable information and help of many kinds.

The results of the visit are to be published elsewhere, probably 121
in England, but it is thought that a preliminary note on the kinship terms may be of present interest. These terms were recorded and tested, not only by direct inquiry through interpreters, but also by daily vernacular use of them in familiar intercourse during nearly four months.

CLANSHIP

The most important and most self-conscious social units at 614
Hano are the clans. Clanship is reckoned by maternal descent; 611
marriage is matrilocal; the clans (and groups of linked clans) are 591
exogamous.

Tewa kinship terms belong to a clan system.[1] At Hano, where 601

---

[1] See W. H. R. Rivers, *Kinship and Social Organisation*, London, 1914, pp. 71, 82. 184
Dr Rivers proposes a threefold division into "clan", "kindred" (based on the patriarchal undivided household), and "family" (father-mother-and-child household) systems of kinship, in place of the twofold division into "classificatory" and "descriptive". On the impropriety of the latter terms see also A. L. Kroeber in *Journ. Roy. Anthr. Inst. Gt. Brit.*, 1909, XXXIX, p. 77.

Hopi villages and described by Fewkes.[1] Of the modern Pueblo 121 game described in the following pages archeologists have thus far found no trace, but we have considered it worth studying nevertheless, so that we shall be able to explain it when it is discovered in the ruins, as it probably will be. The graphic symbolism connected with this game will also be of importance to investigators in connection with Pueblo pictographs, pottery designs, and the like, ancient and modern.

Mr Stewart Culin, in his *Games of the North American Indians*,[2] 114 devotes pages 335 to 382 to a discussion of what he terms the 524 "hidden ball game," which occurs in varying forms among many of the American tribes. Mr Culin classifies the Tewa "cañute", which we describe in this paper, as a variety of this hidden ball game.

We have rather elaborate accounts of this Pueblo game as [171] played at Zuñi, where it has been observed and described by Mr Cushing[3] and by Mrs Stevenson[4] as a game sacred to the War Gods, the playing of which in one of the plazas of Zuñi constituted in olden days one of the most important ceremonial features of February and March. Although this elaborate form of the game played at Zuñi differs in important details from the simple Tewa game that we are about to describe, there can be no doubt that the two are genetically the same. The present simplicity and lack of religious signification in the Tewa game may be due to Mexican acculturation of the villagers who play it, or it may be that the Tewa game has always been deficient in ritualistic associations. The Tewa game has been studied by the present writer at one of the Tewa villages only, at San Ildefonso (*P'c'qwc'gè*), which is situated at the confluence of Pojoaque creek with the Rio Grande, twenty miles northwest of Santa Fé, New Mexico. The same game as played at the neighboring Tewa village of Santa Clara (*K'a'p'c'*),

---

[1] J. W. Fewkes, Two Summers' Work in Pueblo Ruins, *22d Ann. Rep. B. A. E.*, pp. 100–101.

[2] Stewart Culin, Games of the North American Indians, *24th Ann. Rep. B. A. E.*, Washington, 1907.

[3] Ibid., pp. 374–381.

[4] Ibid., pp. 381–382, and M. C. Stevenson, The Zuñi Indians, *23d Ann. Rep. B. A. E.*, pp. 222–241.

13:Harrington E-5 (1911) 1912 NT18 Tewa NT18

114 has been outlined by Mr Thomas S. Dozier,[1] but many details, 524 including the wonderful figures made by the players by variously arranging the game-sticks, have not previously been described. The student is continually surprised at the wealth and intricacy of institutions discoverable among the Pueblo Indians. No fewer than fifty-nine figures made by the San Ildefonseños while playing "cañute" have been photographed and otherwise recorded, and the study of these figures may throw some light on Pueblo designs and on designs and symbolization in general.

600 Thanks are due to the School of American Archæology and the Bureau of American Ethnology, Miss Frances Densmore, Dr H. J. Spinden, Dr P. E. Goddard, Mr K. M. Chapman, Mr J. C. Nusbaum, and the Indians for help received in various ways.

Phonetics

104 It is necessary to preface the description of the game with a key 194 to the Tewa sounds and the symbols adopted to represent them. Positionally there are seven classes of phonems in Tewa.

1. Orinasal vowels, pronounced with mouth and nose passages open: *ą* (Eng. f*a*ther, but orinasal), *æ̨* [illegible]Eng. m*a*n, but orinasal), *ę* (mod. Greek *ε*, but orinasal), *į* (Portuguese s*im*), *ɑ̨* (French p*a*s, but orinasal), *ǫ* (Portuguese t*om*), *ų* (Portuguese at*um*).

2. Oral vowels, pronounced with mouth passage open and nose passage closed by the velum: *a* (Eng. f*a*ther), *e* (mod. Greek *ε*), *i* (Eng. rout*i*ne), *o* (mod. Greek *ω*), *u* (Eng. r*u*le).

An inverted period after a vowel symbol indicates that the vowel is long. A superior vowel symbol indicates that the vowel is very short and grating (*knarrstimmig*). The vowels are breathy, and unless followed by the glottal stop, a glottalized stop, or a voiced sound, an aspiration is distinctly heard toward the end.

3. Semi-vowels: *j* (Ger. *j*a, but very fricative), *w* (Eng. *w*ay).

4. Laryngeal consonants: *h* (laryngeal *h*), ' (glottal stop, lĕnis).

5. Dorsal consonants: *k* (voiceless lĕnis), *kw* (voiceless lĕnis labialized, Latin *qu*is), *k'* (glottalized), *k'* (aspirated), *ŋg* (Eng. fi*ng*er, voiced inflative *g* preplosively nasal), *g* (Castilian abogado), *gw* (Castilian *ju*ez), *ŋ* (Eng. so*ng*), *ŋw* (Eng. La*ngw*orthy).

---

[1] Stewart Culin, op. cit., pp. 368–369.

13:Harrington E-5 (1911) 1912 NT18 Tewa NT18

THE NAME OF THE GAME

192 The Tewa name for the game is *katc'ɛ·p'ɛ'ɛ·*. The Tewa word
524 meaning 'game played' is *'ɛ·*, and *'ɛ·p'ɛ* means 'game-stick' or 'game-sticks.' The verb meaning 'to conceal' is *katc*. *Katc'ɛ·p'ɛ* means literally 'conceal-game-stick,' and *katc'ɛ·p'ɛ'ɛ·* means 'conceal-game-stick-game,' referring to the four hollow sticks that constitute the principal paraphernalia of the game. The game is called in Spanish *cañute*, a word connected with *caña*, 'cane', 'reed', *caño*, 'tube', and *cañuto*, 'internode of a cane or reed'. The Tewa pronunciation of Spanish *cañute* is *kąñųtɛ*. A player of the game is called in Tewa *katc'ɛ·p'ɛ'ɛ·sę·ŋ*, plural *katc'ɛ·p'ɛ'ɛ·sę·ŋnæ̨ŋ*, *sę·ŋ* meaning 'man'; and in Spanish *cañutero*, Tewa pronunciation *kąñųtɛ'ɾa*.[1]

THE STICKS

524 The game is played with four cylindrical, hollow sticks, which might also be called tubes or cups (see fig. 21). The Tewa name for them is *p'ɛ*, 'sticks,' and therefore we call them sticks in this paper. These sticks are at present made of soft wood, usually of pine (*ŋwæ̨·ŋ*) or valley cottonwood (*tɛ·*). One set of sticks found in use at San Ildefonso was made from an old spade handle; another was made from an old window curtain roller. No sticks made of cane or reed could be discovered by the writer at San Ildefonso. No suitable cane or reed grows near the village. But the Indians
[524] state that in earlier times sets of the sticks were made exclusively of a kind of cane called in Tewa *pɛ·* or *pɛ·su* and in Spanish *carrizo*, probably *Phragmites phragmites*, which then grew along the Rio Grande by San Ildefonso. They state that, since the Mexicans came, valley cottonwood (*tɛ·*, *Populus wislizeni*), aspen (*ną̂ną̂*, *Populus tremuloides*), and other kinds of wood have been employed FOR MAKING THE GAME STICKS.

---

[114] [1] The frequent use of the name *cañute* even by the Indians has led Mr Dozier to the entirely unwarranted conclusion that the game is not Tewa in origin. He writes (Culin, op. cit., p. 369): "This is undoubtedly an Indian game, though it cannot have originated among the Tewan pueblos [!]. It is known among them as *cañute*, a name certainly coming from the Spanish *caña*, reed. This same name obtains among the Utes and Apaches, tribes closely associated with the Pueblos."

in every case rigidly adhere to the same decorative pattern. The 524
ti'įŋ stick may bear an x at its end instead of the three parallel 531
bars. The *mulàsɛ'ŋndɛ* stick occasionally has at its end a figure consisting of two parallel lines intersecting two other parallel lines at right angles (the "sharp" of our musical notation), or a figure consisting of three straight lines intersecting at the central point. The simple ornamentation shown in fig. 21 seems to be commonest.

Mr Dozier states[1] that the stick known in Spanish as *cinchado* 184
(see under *ti'įŋ[p'ɛ]* above) is called in Tewa "*pin-do-ĕ*" or "*pin-do-* [114]
tsi-ki". It is not called thus at San Ildefonso, at least. *Pįndù* is 524
the Tewa pronunciation of New Mexican Spanish *pinto*, 'spotted'. At Jemez the stick corresponding to the San Ildefonso *mulàsɛ'ŋndɛ* stick is dotted all over and may be called in New Mexican Spanish *pinto*. See below. But the San Ildefonso Tewa never dot any of the sticks all over and never call any of them *pinto* or *pįndù*. "*Pin-do-ĕ*" could not be understood by the writer's informants; the last syllable appears to be the diminutive element, but this is not postjoined to adjectives. *P'ɛ tsįkì'įŋ* would mean 'a stick notched around or made slender at some one portion of it,' the conception being exactly the opposite of *p'ɛ ti'įŋ*, 'a stick with some one portion of it bigger or bulging'. The writer's informants stated that although a Tewa not familiar with the terminology of the game might call the girthed stick *tsįkì'įŋ* (for which Mr Dozier's "*tsi-ki*" is clearly meant), it is not customarily applied to this stick.

The markings and names of the sticks do not signify different 524
values. In fact, they have nothing to do with the playing of the game. They are merely designations convenient in referring to separate sticks. Thus one will hear during the course of a game such expressions as these: "You will find it in the old mule now certainly"—"No, this time I am going straight for the 'one' stick."

The little stick that is hidden is only an inch or two in length. To distinguish it from the other sticks, which, as stated above, are known as *p'ɛ*, this is called *p'ɛ'ɛ'*, 'little stick', *'ɛ'* being the diminutive-forming element in Tewa. This small stick will in this paper

---

[1] Stewart Culin, op. cit., p. 369.

13:Harrington E-5 (1911) 1912 NT18 Tewa NT18

524 be spoken of as the "pin", for want of better terminology. The pin may be of wood, bone, or metal; most frequently it is an iron nail. It must be sufficiently heavy to fall out of the holes in the sticks readily and of such size as not to become stuck in the oftentimes rough-surfaced and crooked cavities. The writer has never seen the pin ornamented in any way. Mr Dozier describes a pin [531] from Santa Clara as being painted with bands of several different colors.[1]

[422] The sticks are not always the property of those playing. They usually belong to the person or persons who made them. Some very ancient sets can be obtained at the village. The set shown in fig. 21 is very old. The sticks may be kept almost anywhere in an Indian's house.

How the Game is Played

517 *Kalc'ɛ·p'ɛ'ɛ·* is played by males only. The game is played for the 524 most part in winter, when the Indians have little else to do, although they have no objections to playing it in the summer time. At the Tewa pueblo of San Juan it is invariably played on All Saints' eve (the eve of the first of November), when it forms the chief amusement and means of celebration. This year it was played only once at San Ildefonso previous to Christmas. It is played most in January, February, and March. At present it is more likely to be played on Saturday nights or Sundays than at other times.

524 The game is frequently played continuously for hours. In ancient times, it is said, the gaming often lasted an evening and a day. It is usually played outside the house, frequently on the porch with which, due to Mexican influence, the Indian house is regularly provided; but sometimes inside, especially in cold weather. It is played in the day time, or at night. As far as the writer can [114] judge, Mr Dozier is wrong when he says: "Cañute . . . is played *usually* at night within doors."[2]

Immediately before commencing the game two piles of loose (usually dry) sand or dirt are formed, one as the center for each party of contesting players. These piles are called *nǫ̨·ŋmbe'ɛ̨*,

---

[1] Stewart Culin, op. cit., p. 368.

[2] Ibid., p. 369. The italics are the present writer's.

"In rhythmic outline the song is divided into four periods, the first containing six measures and the last three containing nine measures each. The first and third periods are double, and each period has a distinct rhythmic phrase; and the second and fourth periods contain a different rhythmic phrase which is short and continuously repeated. The measure lengths are clearly indicated by accented tones, and the metric unit is steadily maintained except in a few measures. The short tones of the embellishments are somewhat uncertain in pitch, but the intonation of the principal tones approaches accuracy. This is of special interest in the transition from the second to the third periods of the song, the ascending interval of an octave being correctly sung in both renditions. 533

"In this, as in all transcriptions of primitive songs, the musical characters should not be regarded as absolute representations of the tones produced by the native singer. It is found that in certain respects, notably the intervals of the octave and fifth and the regularity of the metric unit, the native performance parallels our standard with a reasonable degree of accuracy; no attempt is made to indicate deviations from this, as observation has shown that such deviations frequently vary with the mood of the singer.

"It is assumed that the speed of the recording phonograph was 160 revolutions to the minute, and the indicated tempo of the song was determined by playing the record on a phonograph adjusted to that speed."

Thanks are also due to Mrs I. H. Rapp, of Santa Fé, who patiently and successfully endeavored to record the song directly as sung by an Indian. [114]●

The words of the song have no known meaning with the exception of the following: 533
539
524

'ɛŋgė'itc	*kǫñųleᵈù*	*hɛ'ᵉnǫ'ǫ*
yonder	the cañute player (i. e., the guesser)	now he is coming
'ɛŋgė'itc	*kǫñųleᵈù*	*hɛ'ᵉnǫ'ǫ*
yonder	the cañute player (i. e., the guesser)	now he is coming
hǫŋwǫmbɛ'ᵉ	*hɛ'ᵉwi''ʃa'pi*	
nothing	now he will find	

13:Harrington E-5 (1911)1912 NT18 Tewa NT18

192 524 or guess' (*nɸ·*, I, emphatic pronoun; *ndc*, I it, prefixed pronoun denoting a combination of first pers. sing. subject and third pers. sing. object; *tµwɸ*, to hunt; *gi'c'ᵉ*, future tense sign); *ndcʃa·*, 'I have found it' (*ndc*, I it, prefixed pronoun denoting a combination of first pers. sing. subject and third pers. sing. object; *ʃa·* to find); *nɸ· 'ctɸ·ŋpc*, 'I have won' (*nɸ·*, I, emphatic pronoun; *'c*, I, prefixed pronoun; *tɸ·ŋ*, a winning; *pc*, to make); *nɸ· ᴬckatc'ᵉ*, 'I am hiding it' (*nɸ·*, I, emphatic pronoun; *ndc*, I it, prefixed pronoun denoting a combination of first pers. sing. subject and third pers. sing. object; *katc'ᵉ*, to hide); *'µ'ᵘ 'µhcjc̀'i'ⁱ*, 'you 1 lied' (*'µ'ᵘ*, you 1, emphatic pronoun; *'µ*, you 1, prefixed pronoun; *hcjc̀*, to lie; *'i'ⁱ*, there); *k'µ·ŋt'ɛ'iwɛ'i'ⁱ k'µ·ŋk'ɛ·*, 'the corn kernels in the pool' (*k'µ·ŋ*, corn plant; *tɛ*, house, in compounds; *'iwɛ*, there, where; *'i'ⁱ*, postfix denoting 3+ number, vegetal gender, referring to *k'u·ŋk'ɛ·*; *k'µ·ŋ*, corn plant; *k'ɛ·*, kernel, grain); *nɸ·'jŋmbi wakµ'jŋgeᴬʾ 'ibiwa'ᵃndɛ'ᵉ*, 'we 3+ are paying from our side' (*nɸ·'iŋmbi*, of us 3+, emphatic pronoun; *wakµ*, side; *'jŋgeᴬʾ*, from a side, locative postfix; *ibi*, we 3+, prefixed pronoun; *wa'ᵃ*, to pay; *ndɛ'ᵉ*, element denoting progressive tense); *'c'i'ⁱ wi 'c kuwà scbc*, 'that goat-beard' (*'c*, there; *'i'ⁱ*, postfix denoting singular number, animal gender; *wi*, one; *'c*, there; *kuwà*, mountain sheep, goat, sheep; *scbc*, beard, growth of hair on the face); *pu·p'c·k'µ·ŋwc*, 'dark anus' (*pu·*, base, buttocks; *p'c·*, hole; *k'µ·ŋwc*, dark); *wa·k'u·'ɸ·p'a·*, 'brown flat testicles' (*wa·k'u·*, testicle; *'ɸ·*, brown; *p'a·*, flat); *pindat'a·*, 'dry penis' (*pinda*, point of penis; *t'a·*, dry).

CAÑUTE AT OTHER PUEBLOS

171 524 In studying the game of *katc'ɛ·p'ɛ'ɛ·* as played at San Ildefonso we could doubtless find, as elsewhere in the ethnology of the Tewa, strong evidence of acculturation. We probably have in this game a blending of Indian and Mexican elements. A comparative study of the forms of the game current at the various pueblos would probably reveal important facts concerning its history.

(114) Most of the literature on the "hidden ball" games of the Pueblo Indians is contained in the report by Culin previously cited, in which pages 335–339 are introductory to this class of games,

pages 351–353 describe the Keresan, 357–364 the Hopi, 3[illegible]7–370 the Tanoan, and 372–382 the Zuñi forms. 171 524

Mrs Stevenson describes the Zuñi form of the game under the name of "*i'yänkolo'we*" in her report on the Zuñi Indians,[1] and in addition contributes a description of the game to Mr Culin's report. [114]

At Jemez some names of objects pertaining to the cañute game were obtained by the writer. The game is called by the Jemez *pá'cù'ud*, 'cane game' (*pá'á*, cane,? *Phragmites phragmites*; *'cù'ud*, game). The sticks appear always to be made of cane. A cañute stick is called *pá'á*, dual *pá'áſ*, 3+ plural *pá'á*. The pin is called *tˡekˡjųſ*, 'little stick', dual *tˡekˡjųſ*, 3+ plural *tˡekˡjų* (*tˡe*, stick; *kˡjų*, diminutive). The reed sticks shown in fig. 21 are from Jemez, and their markings may be compared with those of the set from San Ildefonso shown in the same figure. They are called 171 172 524

(1) *kʼclá·*, 'at the top', referring to the one band (Tewa *wi'jŋ*).
(2) *witá*, 'at two places', referring to the two bands (Tewa *wiji'jŋ*).
(3) *pctá*, 'in the middle', referring to the band (Tewa *ti'jŋ*).
(4) *pëdá*, said of big or bad freckles, referring to the spots (Tewa *muládsę'ndc*). The corresponding stick at San Ildefonso is never spotted.

The Jemez play cañute mostly in winter: *tcc̈'* *'epá'cù'udnęnę''ę*, 'in winter they play cañute' (*tcc̈'*, winter; *'e*, they 3+; *pá'á*, cañute stick; *'cù'wǫ*, to play; *nęnę''ę*, progressive). 171 524

The following information was obtained from an Isleta Indian at Albuquerque. The Isleta call cañute *patul*, which the informant could not etymologize. The stick with a single band near one end is called *wimà*, 'one'; the stick with a single band near each end is called *wisi*, 'two'; the stick which is spotted all over is called *tcrc̈*, 'spotted'. At Isleta the sticks are made of wood and are called *fa·'u·*, 'little sticks' (*fa·*, wood; *'u·*, diminutive). 171 172 524

A Taos Indian at Santa Fé furnished the following. The Taos call the game *kañute* (< Sp. *cañute*) or *kañute'ăpană*, 'cañute game' (*kañute*, *cañute*, < Sp. *cañute*; *'ăpană*, game). The sticks are made of wood and are called *t'ųtilănă*, which the informant could not etymologize.

---

[1] M. C. Stevenson, op. cit., pp. 318, 333–341.

14;Harrington E-5 (1911) 1912

NT18 Tewa NT18

TEWA RELATIONSHIP TERMS

By JOHN P. HARRINGTON

THE Tewa-speaking Pueblo Indians occupy at present five villages northwest of Santa Fé, New Mexico, and one village in northeastern Arizona. Each village has its peculiar dialect, but the dialectic differences are very slight. The notes embodied in this paper were obtained at the villages of San Ildefonso, Santa Clara, San Juan, and Nambé, all near Santa Fé. The writer acknowledges his deep indebtedness to Miss B. W. Freire-Marreco, whose study of the social and governmental organization of the Tewa has given her a rare insight into the Tewa customs of expressing relationship and the like. 131 [197] 114

No other set of relationship terms of Southwestern Indians has been studied in which the classificatory system is so little developed as in Tewa. The writer believes that in the common talk of the Tewa Indians more descriptive terms denoting relationship are used than even in our highly analytic English system. 60 [171]

The peculiar use of postjoined *'e* in many of the terms is worthy of further attention than can be given to it in the present paper. It appears that nothing like it has been discovered in any other Southwestern language. The original meaning of *'e* seems to be 'offspring,' 'son,' 'daughter.' Postjoined to any term denoting blood-relationship with the exception of *tara* 'father', *jíja* 'mother', and *mą'ʔmą* 'male cousin', it gives what the younger of two relatives by descent calls the elder by descent. Thus: *naḃí t'ele*, 'my grandfather', ... response: *naḃí t'ele'e*, 'my grandchild'; *naḃí sa'ⁿjo*, 'my grandmother', ... response: *naḃí sa'ⁿjo'e*, 'my grandchild.' *tų'ʔuų*, 'uncle,' forms *tų'e*, 'nephew or niece of an uncle,' not *tų'ʔuų'e*, as we should expect. *tara'e* and *jíja'e* are merely familiar forms of *tara* and *jíja*, 'father' and 'mother,' like German *Väterchen* and *Mütterchen*, although we have regularly enough *naḃí kwatara'e*, 'my stepchild,' said by a father, and *naḃí kwajíja'e*, 'my stepchild,'

15: Laski E-5 (1943-1956) 1958 NT18 Tewa NT18
San Juan

114

FOREWORD

This book needs no introduction, as it carries its own revelation and its own message. What I might contribute for readers who are without direct experience of Pueblo life and religion is my testimony to the essential and profound truth of the book. This testimony is not that of an anthropologist but of a layman who himself has experienced at intervals across thirty-seven years the greatness of Pueblo art, Pueblo religion, and Pueblo life philosophy.

As Dr. Laski insists, the Pueblo religious experience cannot be verbalized in any complete way. And it is a religion, or a group of related religions, totally without proselytizing impulse. Indeed, it rather assumes the incommunicability of that which we call religion, but which is to the Pueblo Indian an all-embracing individual and group life way.

I do not suggest that the Pueblo religions are altogether unique in this integratedness and this union of ritualistic participation with individual intensity. But it is truly possible that nowhere in human time have there taken place more perfect flowerings of the man-society and man-society-nature relationship. And doubtless, like other flowerings, through prehistory, whose intent has been the deepening of personal and cosmic consciousness, these Pueblo religions, sooner or later, will fade away—hence the importance of such a record as Dr. Laski is supplying.

John Collier

15: Laski E-5 (1943-1956) 1958 NT18 Tewa NT18
San Juan

I. INTRODUCTION

The Tewa speaking Pueblo Indians are the heirs of a 101
great culture of the past. They may represent one branch of
the descendants of those Pueblo Indians who, long before the
arrival of white men on this continent, built the spectacular [172]
cliff dwellings of Mesa Verde in southwestern Colorado,
which were abandoned around 1300 A.D. (Figure 1).[1] Although they are surrounded by Spanish and English speaking
neighbors, and hence have been slightly influenced by Roman [177
Catholic Christianity, the Tewa have still preserved a color- 797]
ful culture of their own.

Today, after 350 years of contact with white men, Tewa 178
culture is about to break down, and, since the return of the
veterans from World War II, this cultural disintegration has
reached a critical stage. In another generation or two, Tewa
culture may have completely disintegrated, and many of the
sacred rites which are still alive today will have faded away
into little understood traditions and be known only as superstitions.

This monograph is an attempt to capture the spirit of one 121
of the most important Tewa ceremonies, a ceremony which,
though never before recorded, has been transmitted through
countless generations as a living experience; the written drama, unfortunately, is nothing but the skeleton.

The Raingod Drama, as presented in this paper, is a
unique ceremony of the Tewa. It is different from most 121
other Pueblo Indian rituals, and, therefore, it must be kept in 114
mind that the statements made on Tewa religion in the light
of the Raingod Ceremony do not necessarily apply to Pueblo
religion in general. No attempt at overall comparison of the
Tewa religion with the religion of other Pueblo groups is
made. Any information about Tewa ceremonial practices contained in this monograph, and for which no other reference is
given, was obtained directly from my Indian friends.

My first visit to San Juan dates back to 1943, when many 114
of the Pueblo young men were at the battle front. It was at

114 that time that I first met Xa·yɛ· t'a·ᵃ, whose name may be
[115] translated as 'Striped Stone Fetish,' and who eventually gave and explained the text of the Raingod Ceremony to me.

Xa·yɛ· t'a·ᵃ loved his people, and their ancient lore
114 was an essential part of his own life. He revealed the cere-
124 monies without personal benefit, and with no other interest than the conviction that I was sincere and sensitive to the great beauty and deep meaning of the sacred traditions. Both of us were agreed that, at a time when the practice of the ancient Indian heritage was dwindling, this was a meaning which it was our duty to preserve. Still, it was not until after the war, when it became evident how rapidly the ancient traditions were breaking down, that he consented to the eventual publication of the ceremonies after his death.

Xa·yɛ· t'a·ᵃ is no more; he has gone to Yáŋ wíkimo,
116 the place of rejoice making. Since he passed away, I have made friends with many other Tewas, most of whom, I am sure, do not appreciate his attitude. Although the old man realised that he would be criticised by his own beloved people, he was never worried about this, nor did he even feel guilty. His purpose, like mine, was to preserve the sacred rituals as creations of art, and as an expression of the spiritual longings of sensitive people in their desire to "seek life." In doing so, we have tried to pay homage to Tewa religion, and to honor the Tewa Indian. Concerned with the appropriate presentation and acceptance of the ritual, Xa·yɛ· t'a·ᵃ said to me on several occasions: "Please be sure to tell your readers that the purpose of our ceremonies is not entertainment, but attainment; namely, the attainment of the Good Life. Our dramas,
[771] our songs, and our dances are not performed for fun as they might be in the white man's world; no, they are more than that: they are the very essence of our lives; they are sacred."

The Background

A. The Pueblo

361 San Juan is the largest and northernmost of five villages of Tewa speaking Pueblo Indians in the upper Rio Grande

346 Pueblo kivas are round and at least partially underground, with an entrance through a roof opening.

All the kivas in San Juan, however, are rectangular and are part of larger structures consisting of both ceremonial rooms and private dwellings. There are two such building complexes in San Juan. In one of them is the Practice Kiva, where social dances are held and where dancers of both moieties get ready for public ceremonial dances. This is the only kiva in San Juan to which non-Indian visitors may be admitted.

In another structure is a large rectangular kiva, poeŋ tɛ'ɛ, used by both moieties for holding ceremonies (Figure 4). Adjoining the Large Kiva are two smaller rectangular kivas, or si· p'hofkwɛ·, one for each of the two moieties, the Winter and Summer men respectively. They constitute a kind of inner sanctum, which is reached through an antechamber. In these small kivas, masks and other paraphernalia are kept, and it is also here that the Kachina and dancers get ready for secret ceremonies. Most of the private dwellings in the kiva structures are occupied, but in the larger structure, two rooms have now been abandoned and are crumbling into ruins.[6]

346
178
174
The rectangular kiva, as part of a larger dwelling structure, is by no means an original Tewa trait. It is probable that, until about the middle of the fourteenth century, all Tewa kivas were detached and circular. Circular free-standing kivas still exist today in the Tewa pueblos of Nambe and San Ildefonso, but San Ildefonso also has rectangular kivas which form part of two story structures. The rectangular kiva may have been introduced to the Tewa along with other western culture traits around 1350 A.D. by a group of western people who came from east-central Arizona, and who might have been the Keres.[7] Reed assumes that the Rio Grande Keres borrowed the circular kivas from the Tewas while, on the other hand, during the past six centuries, the tendency among the Tewa has been towards square kivas.[8]

346
178
114
174
It seems to me that drastic changes in the use of directions, shape, and proportions are always an indication of simultaneous changes in basic philosophy and attitude. In the case of the Tewas, I feel that the structural change of the kiva from circular to rectangular cannot be explained as a mere defensive mimicry in the face of the white conquerors, as

Stevenson implies.[9] This change of kiva structure in the upper Rio Grande is only one aspect of a development which included the acceptance of a whole complex of western culture traits by the Tewa. I feel, rather, that the basic structural change in Tewa kivas reveals more than the assimilation of one imported culture trait. This change of *Gestalt* and *Formgefühl* is also a visible expression and direct result of the fact that the Tewa had accepted a new ritual from the immigrants, a ritual which might well have been that of the Keresan curing societies, and that they had experienced—although without ever fully accepting it—the impact of a new social order: that of the matrilineal clan.[10] 346 114 178 174

1. The Large Kiva. To enter the Large Kiva, a man climbs up a ladder (or, in recent years, Americanized stairs) to the roof where he finds a square opening, the tɛ·'ɛ so·fo t'affiditɛk'ɛdi, near the east wall. Through this opening a second ladder leads down into the Large Kiva. There is also near the east wall, a smaller, circular opening[11] in the roof, just above a fireplacelike, step-shaped, adobe structure.[12] No fire, however, burns here. In the east wall, just above the ground, is a small opening for ventilation, and through which children may crawl to the outside. Along the west and north walls runs an adobe built, low row of seats. The northern third of the kiva is usually reserved for the women and children of both moieties, and this section is partitioned off by a row of posts which supports the ceiling (Figure 5). Along the walls in the southwest corner, the men of the nonparticipating moiety are seated. The sponsoring men do not appear in the audience; they are too busy preparing the ceremonial and guarding the pueblo. Along the north wall are two fireplaces; the kiva used to be lit by their fire and by the light of candles near the poles and on niches along the south wall.[13] 346 [417 177] [354 393]

2. The Small Kiva. There are two Small Kivas, one for the Winter people and one for the Summer people, which adjoin the Large Kiva. When the Kachina emerge through the roof from the Small Winter Kiva, they can immediately step over 346 616

B. Kachinas Without Masks

The Turtle Dance of San Juan is held on December 26, preceded by a short, sunset appearance the evening before. Formerly, however, this prelude was given in the early morning hours, on the day of the dance, in a brief presunrise performance which is still well remembered for the beauty of its setting. 796

Only a small group of men dancers participate in the evening appearance on the plaza. They wear kilts, the traditional moccasins, and a heavy black or dark blue blanket, with red embroidery along the lower border, which hangs from their shoulders. Turtle shells are attached to their legs below the knees. In the left hand they carry evergreen twigs; in the right, a tannish gourd rattle. Their faces are lavishly painted with the man's rouge, seŋ p'i'i·. [292] [302]

The Turtle Dance itself is celebrated the day after Christmas. Blankets are no longer worn by the dancers; instead, they decorate their upper bodies with a grayish, clay paint, nap'ɔ· ƀun. [302]

Two masked dancers, the cave·yó·, appear with the "turtles"; their masks are made of skin. Similar to the abuelos of the Matachina Dance, they carry long, leather whips with which they threaten the bystander.

The motions and songs of the unmasked turtle dancers are similar to those of the dancing, singing Kachina in the p'o ku ceremony. There are indications that the Turtle Dance was originally an important, pre-Christian, solstice ceremony in which all the Pueblo males participated. Formerly, however, the Turtle Dance took place before the twenty-sixth of December, but was postponed until after Christmas when the Pueblos became Christianised. Parsons considers the Turtle Dance of San Juan "a Kachina dance without masks."[21] But, if the masks are so sacred that "he who wears the masks becomes a god," can there be a Kachina without mask? The turtle dancers are unmasked but they wear the *fɤ·*, a blessed, soft [797] [114] ●

If the Butterfly Dance is 796
considered sacred, it is one of the gayest and happiest dances 522
as well, and so are its songs: [533
539]

Butterfly girls are dancing
From flower to flower;
Butterfly boys are dancing
From flower to flower.

Anderson[24] sees in the unmasked Kachina an Eastern 796
adaptation of the masked Zuni Kachina to the necessities of a 114
church controlled environment along the Rio Grande. However, ●
if this assumption were correct, why would two masked dancers, cave·yó, who are not Kachinas, be participating in the unmasked Turtle Dance? Anderson does not seem to be aware of the fact that the Tewa have not only the maskless Kachinas, but also an ancient and important tradition of masked Kachinas as well. By considering a maskless Kachina as an incomplete version of a masked Zuni ritual, he, as well as Parsons,[25] whom he quotes, ignores the fact that a man may become a Kachina not only by wearing the mask, but also—and perhaps primarily—through his sacred paint and inner attitude.

C. Initiation Ceremonies

While the appearance of the masked Kachina is optional 796
in the ceremonies so far mentioned, there are three major 881
ceremonies in San Juan in which the participation of the Raingods is essential.

Of the two kinds of initiation ceremonies, the k'ɛwɛ·'ɛ is for children of puberty age, and the rarely given p'o ku· 'waterpouring' is for adults of any age.

The initiation into the moieties, called k'ɛwɛ·'ɛ, was for- 881
merly held once or twice a year for boys and girls ten to
twelve years of age.[26] This initiation takes place in the inner [616]
sanctum of the Small Kiva (Figure 4) and is the only time when women are allowed to enter.[27]

Girls and boys are initiated during the same ceremony, but the girls' initiation takes place first and its ritual is

796 756 the medicine men may be understood as a survival from a time when all religious societies took turns in the ritual. At present, no religious society except that of the Bears may present the Raingod Ceremony.

796 ●114 536 While I am speaking of the Raingod Drama, it must be pointed out that the Tewa do not seem to be conscious of the dramatic quality of their ceremony. I have obtained this drama in a series of talks and interviews spread over a long period of time. Some sessions lasted but a few minutes, others as long as three to four hours. The division of the drama into scenes was not given by any of my Indian friends; it simply seems to be a logical one for the material presented.

The Raingod Ceremony is by no means the only drama of the Tewa. Many other ceremonial events of the Pueblos, including the Tewa, have dramatic quality and could be written up as dramas.[32] The reasons that no more of the Pueblo ceremonies have been so reported seem to be threefold: most non-Indian observers understand the gestures but not the Indian dialogue; many of the ritual dramas have literally gone underground and cannot be observed by the outsider; and finally, most Indians are inclined to describe the ceremonial actions rather than to give or translate the spoken words.

The drama here described is one prepared and presented by the Winter people. But the reader should keep in mind that the same ceremony may be organized by the Summer people or, more rarely, by the medicine men. It is the organizing group which makes all the preparations in the Small Kiva, and whose members serve as masked Kachina, Assistants, ushers, and guards.

796 Preparations for the ritual may last anywhere from six to eight days, during which try-outs are made for the various roles. Four days of cleansing and fasting in the Small Kiva precede the actual presentation and the repainting and redecorating of the masks. During these four days the Old Men [887] keep the young men company by telling them stories, i.e., ancient legends, personal experiences, old men's wisdom, and jokes.

The ceremony proper is held in the Large Kiva at night (after the four days of fasting), and lasts about two to three [202] hours. Although everybody has known about the forthcoming

I. INTRODUCTION

The evening when he gave me the initiation ceremony of a medicine man, Xa· yɛ· t'a·^{a} was not feeling well. As his legs were hurting him, he lay down on his bed, and I tried to alleviate his pain by massaging his legs as well as an uninitiated white person would know how to do it. It was then that he told me the story written on the following pages. He talked for many hours, and the massage was the longest I have ever given. I believe, though, that it was a very poor massage without a medicine man's physical or spiritual strength, without the assistance of mysterious herbs and sacred cornmeal, and holy water and blessed feathers; without the support of powerful bear claws and bear teeth; without the help of the great Cornmother and of sacred prayers. It was the very poor massage of a poor "unlearned" white woman. But it relaxed Xa· yɛ· t'a·^{a}, and it made me more receptive to his tale. 123

When eventually I went home, in the early morning hours, I wrote down the story exactly as he had told it. Several months later we talked about it again, and I asked many questions on details which had been omitted in the original account. Many of these details, especially those referring to terminology, were later added in footnotes to the original story, the wording of which comes as close to the old man's account as I could remember it. 126

The information on other healing ceremonies, as explained in the third chapter, is based on information received from different San Juan sources over a period of several years. 114●

[P.94 contains no text]

of the Christian saints. In the gothic transfiguration of early Christian saints, or in the meditative contemplation of a Tibetan monk, a mediumistic human elevates himself spiritually to a higher plane. He seems to lose his bodily heaviness and to transcend spiritually into an exalting and essentially sweet beyond. The exalted monk suffers and rejoices in deep loneliness. 755 786

The shamanistic Bear man, however, does not seem to reach upwards into an esoteric world. He rests essentially on his earthen ground to become a vessel for great powers which descend upon him and which add heaviness and supernatural strength to his human body. He enjoys the presence, encouragement, and approval of spectators whose admiration and recognition give him further moral and physical strength. Unlike the Christian monk, the Bear man is not in a religious uplift but in a magic condition which strengthens his earthliness. In the entranced medicine man, his maleness has become intensified; he has become a caveman; he is frightening; he has become a Bear.

In an entranced woman, blissful womanliness is enhanced; an entranced woman seems to suffer and enjoy suffering. She inspires pity; the entranced Bear man inspires fear. This is why, among the Pueblos, only Bear men can become magical and cure people. Bear women may assist the men in becoming magical, but they cannot become magical themselves.

C. H. Charles has pointed out that many shamanistic rituals can be understood as dramatic performances in which the patient gradually projects and acts out his psychological problems through a process of transference and identification with the entranced shaman who destroys the demon or evil spirit: 755 114

> Until the patient can bring up his demon to consciousness it cannot be dealt with nor disposed of, but lurks guerillalike in the unconscious and causes constant trouble. This unconscious mechanism in the psyche of the patient becomes more activated through proximity and sympathy to the powerful, controlled activity of a similar portion of the psyche of the shaman. The healthy shaman evokes and acts out the horrible demon which

755
114

> brings death; and he also acts out the forces which bring life and health. Through his drama the shaman stimulates and brings to consciousness the battle within the patient, and helps to achieve a dénouement such as the patient has been unable to achieve alone.[100]

The making of the medicine man may be considered as another ceremonial drama of the Tewa, a true psychodrama, performed for and by all those who through identification with the entranced shaman are willing to find and to combat the evil spirit within themselves. The Tewa shamanistic ritual is, like that of the Raingod Ceremony, a drama performed for the benefit of all those who Seek Life.

756 Among peoples of shamanistic culture, there exists a widespread belief that a man who receives a calling must follow it lest he become ill himself. The forces which called him may turn against him—refusal to obey may upset the inner rhythm.

However, there also seems to be a fear about becoming a shaman. Great Elk, the old man mentioned by Xa·yu· t'a·ⁿ, cried at the thought of seeing his son become a Bear. Why was it that his heart trembled? Is the experience of becoming a Bear frightening?

756 "Yes," said Xa·yu· t'a·ⁿ, "it may indeed be frightening if you have gone too far."

I asked the old man to explain this a little further. He shook his head and remained silent for a long time before he answered:

> What I am trying to say is hard to tell and hard to understand—even for Fishpeople—unless . . . unless you have been yourself at the edge of the Deep Canyon and have come back unharmed. Maybe it all depends on something within yourself—whether you are trying to see the Watersnake or the sacred Cloudflower, whether you go out to meet death or to Seek Life. It is like this: as long as you stay within the realm of the great Cloudbeings, you may indeed walk at the very *edge of the Deep Canyon and not be harmed.* You will be protected by the rainbow and by

REFERENCES

114

[1] Reed, 1949. Archaeologists and historians have recorded the names of about sixty villages, now extinct, which were formerly occupied by the Tewa. See Hodge, 1912, p. 737; Hibben, 1937. [172]

[2] Another Tewa pueblo, Hano, is on the Hopi reservation in northern Arizona. [361]

[3] Hammond, 1927, p. 100.

[4] The word "moiety" is derived from the French moitié 'half.'

[5] Parsons, 1929a, p. 89.

[6] Parsons (1929a) mentions only two kivas in San Juan. Her "Little Kiva" is the same which is here referred to as "Practice Kiva"; her "Big Kiva" is identical with our "Large Kiva." The two adjoining Small Kivas, mentioned here, have been remodeled in recent years. It seems that, formerly, preparations for certain ceremonies could be made either in a nearby private home, or in one of the Small Kivas. Today, only the kivas are used. [346]

[7] Reed, 1949, p. 182.

[8] Reed, 1949, p. 180.

[9] Stevenson, 1914, p. 68.

[10] I have given the name "Theory of Directions" to the method which allows one to determine and interpret such interrelations between structure, dimensions and directions, on the one hand, and thought patterns or attitudes, on the other. [121]

[11] Called the si· wo· wabe·. 114 346

[12] Called the 'i· wí fiŋ. Hewett and Dutton (1945, p. 43) reproduce the picture of this structure in the kiva of Nambe, and refer to it as an altar. In San Juan, it is somewhat higher and has more clearly marked steps than that of Nambe, and, at least today, is never used as an altar for sacred objects, [178]

114
346
[798]

but rather for the picturesque enthronement of the Clowns, the guards, and the governor.

[13] In 1956, the Large Kiva in San Juan had been modernized; the hole in the lower side wall, through which formerly only women and children had been allowed to crawl, had been replaced by a side door which leads behind the 'i·wí fiŋ, and which is now used by everybody except the ceremonial dancers and their assistants. The stairs and side walls leading up to the roof have been widened and are now built of adobe.

114

[14] Spinden, 1933, p. 89.

[15] Charles, 1935, p. 33.

[16] Sims, 1949, Plates IV, V, VI, and VII.

[17] Sinclair, 1951, p. 7.

[18] Smith, 1952, pp. 294-310, especially Figs. 27 and 28, and Plates E and F.

[19] For a discussion of early reports on Kachina dancers and a detailed bibliography, see Dockstader, 1954.

[20] Parsons (1929a, p. 191) mentions the Harvest Dance as one of the ceremonies in which Kachinas appear without masks. However, my informants do not agree with Parsons on this.

[21] Parsons, 1929a, p. 180.

[22] Compare Bunzel, 1932b, p. 868: "When no mask is worn the same magical power that resides in the mask is imputed to the body paint."

[23] Waters, 1950, p. 261 ff.

[24] Anderson, 1955, p. 411.

[25] Parsons, 1928, p. 587.

[26] In the 1920's, when many children began to attend boarding schools off the reservation, it became customary to delay the initiation considerably. This explains Parsons' statement that boys are initiated after the age of fifteen (1929a, p. 151).

[27] Parsons (1929a, p. 151) states that the boys undergo a four day retreat with fasting before the initiation proper. It is likely that such a custom did exist. My informants report, however, that, at the present at least, boys do not have to observe a retreat and fast. The only initiation preceded by four days of fasting is that of adults who undergo the waterpouring. 11f [881]

[28] Parsons' assumption that girls are not initiated appears to be erroneous (1929a, p. 151). [881]

[29] According to Dozier (1954, p. 347), the Tewa of the pueblo of Hano in northern Arizona used to have four Kachina night ceremonies, spaced equally throughout the year. [796]

[30] Parsons, 1929a, pp. 168 ff.

[31] Parsons, 1929a, p. 153.

[32] Fewkes considers the Hopi Watersnake Ceremony as a theatrical exhibition and describes it in several "acts" (1903, pp. 40 ff). Collier emphasizes the dramatic quality of Pueblo ceremonies in general (1949, pp. 62, 63).

[33] This identifies himself as the giver of the offering.

[34] The original employs the term "xo· xú·ⁿ àⁿ" 'to strengthen your legs and arms' which is the ceremonial term for "eating."

[35] The following is a shortened version of the much longer, formal speeches actually made.

[36] The following is a more literal translation of the last three lines, also found in the last three lines of the next speech on p. 36: [539]

May all of us catch up with that
Which we are thinking about most
To have for ourselves;
May we have in the house
Plenty of meat.

In this context, the term "meat" stands for everything which is needed in the home, therefore "plenty of meat" implies abundance. The preceding thought can, of course, be rendered in English in more than one way, thus explaining the slight variations in the translation.

●114 [37] For detailed description, see Appendix I, "Holy Water."

[38] See Appendix I, "Tobacco."

[39] This line refers to the rainbow.

[40] For a discussion of the basic meaning of this phrase, see p. 85.

[41] This line shows the Christian influence; here the Clowns are making fun of the white people's religion.

[522] [42] The Clowns' jokes vary a great deal at each ceremony, and their number is, of course, unlimited. Only a few instances are given here as illustrations. Where personal names are used, they are fictitious.

[178] [43] Again this is the Christian influence; formerly the Clowns' jokes were not resented.

[364] [44] This is the name of the trash pile at the outskirts of the pueblo.

[323
372] [45] This is reference to the cow and sheep manure used in pottery making for purposes of slow burning.

[46] This is an allusion to a romance going on between Flowermountain and Bearmountain.

[47] These names, although fictitious, refer to a man and a woman of the pueblo about whose romance some gossip had been going on.

[788] [48] The Clowns say here the opposite of what they mean as they belong to the spirit world where everything is reversed.

[776] [49] O 'xu'a povi 'Cloudflower' is a beautiful, flower-shaped cloud symbolising the powers and the Great Goodness which the Raingods bring.

[50] This is the lake nearest San Juan.

[778] [51] The sacred Earth Navel is a secret shrine in the center of the pueblo where certain nightly ceremonies are performed.

References

[52] The Kachina are led by their Assistants who carry them melons and yucca whips for them because the eyeslits in their masks are so small that the Kachinas cannot see enough to walk safely up and down the ladder by themselves. [778]

[53] This word is pronounced with a thunderous accent on the first and next to last syllables; its emphasis indicates that the climax has been reached. [194]

[54] There are no swearing words in the Tewa language. Thus, where under the white man's influence swearing language is used, it is done either in Spanish or English, and implies a ridiculing of white man. [195]

[55] The Raingods are supernatural beings; they must not be touched, nor can they move or talk like humans. They express themselves in gestures only, the meaning of which is translated to the People by either the Clowns or the Cacique. [776 207]

[56] Seŋ poɛŋ p'a· 'Man Ceremony' is also the ceremonial term for sexual intercourse. [833 195]

[57] There are two Summer virgins and two Winter virgins in each ceremony.

[58] The Clowns, representatives of the spirit world, say here again the opposite of what they are expected to say: "May you gain Life everlasting."

[59] These are the feathers which the performers had worn tied to their waists and hanging down from their necks and over their foreheads. [237]

[60] Collier, 1949, p. 63.

[61] Lucas, 1949, p. 69.

[62] Lucas, 1949, p. 65.

[63] Nietzsche, 1924, p. 56.

[64] Goethe, 1827, p.

[65] Adolf, 1951, pp. 112 ff.

[66] Brasseur de Bourbourg, 1862.

[67] Whitman, 1947, p. 17.

● 116 [68] Charles, 1948, p. 174.

[69] Aristotle, Poetics, Chapter 6, cited in Lucas, 1949, p. 14. In speaking about tragedies, Aristotle did not imply an unhappy ending. He simply meant "drama which renders human life seriously as contrasted with comedy which renders it grotesquely."

[70] Lane Cooper, Aristotle on the Art of Poetry (New York, 1913), p. 19, cited in Lucas, 1949, p. 26.

[71] Moreno, 1946.

[72] Spinden, 1933, p. 99.

[778] [73] Parsons' description of Yeŋ sedó· (1929a, p. 153) deviates considerably as she states that his mask is "black with mouth in red, a triangle of red on the forehead and zig zag lines from the eyes in red, yellow, and blue," a description which my San Juan informants reject as erroneous.

[74] Parsons, 1929a, p. 153.

[75] Jung and Kerenyi, 1949, p. 131.

[195] [76] Parsons (1929b, pp. 9-10) states that this phrase is synonymous with ceremonial potency, personal courage, and adequacy. But she feels that "there is no implication of hermaphroditism." I agree with Parsons only in that the Tewa Indian is not conscious of a concept of hermaphroditism. However this does not exclude the possibility of such underlying symbolic meaning.

[77] Parsons, 1929a, p. 263.

[78] Frazer, 1935, Part I, Vol. 2, 130 ff.

[79] Frazer, 1935, Part I, Vol. 2, 136.

[80] Proclus in "Platonis Timaeum Commentarii, 293c, cited in Jung and Kerenyi, 1949, p. 205.

[81] Frazer, 1935, Part I, Vol. 2, 138.

[82] Frazer, 1935, Part IV, Vol. 1, 67-68.

[83] A. B. Ellis, The Ewe Speaking Peoples of the Slave

114

Coast of West Africa (London, 1890), pp. 140 ff, cited in Frazer, 1935.

[84] Frazer, 1935, Part IV, Vol. 1, 67. For further references, see also Frazer, 1935, Part I, Vol. 2, 150 ff; and Penzer, 1952, pp. 131-184.

[85] Haeberlin, 1916, p. 37.

[86] See Appendix III.

[87] Jung and Kerenyi, 1949, pp. 218-219.

[88] Haeberlin, 1916, p. 12.

[89] Fewkes, 1903, p. 17.

[90] Colton, 1949, p. 32.

[91] Stephen, 1936, pp. 291 ff.

[92] Fewkes and Stephen, 1893, p. 281.

[93] Stephen, 1936, p. 331.

[94] Parsons, 1929a, p. 274. For the Arizona Tewa, see Stephen, 1936, pp. 342, 346.

[95] Wendorf, 1953, pp. 19-20.

[96] Parsons, 1929a, p. 86.

[97] Parsons, 1929a, p. 128.

[98] Parsons, 1929a, p. 303. See also Spinden, 1933, pp. 99, 123; James, 1927, pp. 127 ff. The latter tale of a big snake P'anyu', who provided abundance if a human life was offered to him every month, is said to have come from Pecos, but the author reports that the story was also well-known among the Tewa of San Ildefonso. 776 171

[99] Parsons, 1929a, p. 274.

[100] Stevenson, 1914, pp. 79-80.

[101] Crooke, 1921, p. 415.

[102] Crooke, 1921, p. 416.

[103] MacCulloch, 1921, p. 409.

[104] MacCulloch, 1921, p. 406.

[105] Daniel G. Brinton, *Nagualism, A Study in Native American Folklore and History* (Philadelphia, 1894), pp. 49 f, cited in MacCulloch, 1921.

[106] MacCulloch, 1921, p. 408.

[107] Wake and Westropp, 1875, p. 42.

[108] Wake and Westropp, 1875, p. 71. See also Marr, 1936, p. 28.

[109] Horapollo, 1950, p. 57.

[110] Haeberlin, 1916, p. 57.

[111] Haeberlin, 1916, p. 23.

[112] Haeberlin, 1916, p. 20.

[113] Haeberlin, 1916.

[114] Amsden, 1949, p. 100.

[115] Wormington, 1947, p. 19.

[116] Whitman, 1947, pp. 25-26.

[117] Whitman, 1947, pp. 19-20.

[118] Whitman, 1947, p. 17.

[119] Whitman, 1947, pp. 25-26.

[120] Goldfrank, personal communication.

[121] Goldfrank, 1945, p. 536.

[122] Goldfrank, 1945, p. 536.

[123] Goldfrank, personal communication.

[124] Thompson and Joseph, 1944, p. 47.

15; Laski E-5 (1943-1956) 1958 NT18 Tewa NT18
San Juan

114 [177]

[125] It is understood that this statement refers only to the "inner happiness" or contentment, to a state of mind which existed before Tewa culture was shaken through contact with the white man's culture. The statement in the text must, therefore, not be interpreted as a reference to present day economic or cultural conditions.

[126] Benedict, 1949, p. 72.

[127] Parsons, 1929a, p. 127.

[128] Parsons, 1929a, p. 128.

[129] Zimmer, 1946, pp. 66, 67.

[130] Spinden, 1933, p. 123.

[131] For details, see Zimmer, 1946, pp. 72-76.

[132] Zimmer, 1946, p. 73.

[133] Freud, 1932, pp. 405-410; Bachelard, 1938, pp. 106 ff.

[134] Wilhelm, 1931, pp. viii, 25.

[135] Zimmer, 1946, p. 90.

[136] Zimmer, 1946, pp. 98, 101.

[137] Dr. Helen Adolf of Pennsylvania State University has called to my attention the fact that a thought similar to that of the Tewa "loved and liked" concept is expressed in Wolfram von Eschenbach's great epic poem "Parzival," written in middle high German in the early thirteenth century. At the very end of the poem (827, 19-24), when the author summarizes the story of his hero who has found salvation in his quest for the Holy Grail, von Eschenbach praises a life which succeeded in combining God's grace and favor (hulde) by men.

[756]

[138] Dedication in infancy to the Bear society—when a parent was cured or hoped to be cured—was known in the past, but such membership is no longer enforced. There are also indications that formerly a person could become a member of the Bears by trespass. Children are warned by their parents not to play medicine man, for the Bears might come to adopt them into the society. However, during the last thirty years, no membership by trespass or by dedication in

114

[756] infancy ("giving water") has been enforced by any of the religious societies of San Juan.

[139] A stone fetish.

[778] [140] The bundle consists of the yia kwiyó·, sacred Cornmother, wrapped with cornmeal and blessing feathers in a deerskin and outer reed container.

[141] Parsons (1932, p. 317) reports that during the initiation of a shaman in Isleta some people are crying.

[142] The Tewa word used here is p'iŋ ɛ· wo niŋ 'hard on the heart.'

[143] The Tewa word is ču· gɛ 'i· 'evil spirits,' but also translated as 'witch.'

[144] See Appendix I for the use of this cornmeal.

[145] The medicine waterbowl.

[146] The stone fetishes.

[147] He takes a little sacred cornmeal from a pouch, blows his breath upon it, and sprinkles this cornmeal on the altar.

[756] [516] [778] [148] The Bear men sit against the wall with their legs bent at the knees and drawn towards their body. Each Bear has directly before him his Bear paw, his sacred Cornmother, two eagle feathers, a stone fetish, and several small pouches with sacred cornmeal, herbs and stones. Bear women, who always sit at the outside of the row, do not have Bear paws as they do not fall into trance. Unlike the Caciques and other Fishpeople, the medicine men do not have individual altars, but their sacred objects are a part of the large corn meal altar drawn on the floor before them, with the holy waterbowl as its very center and two lightning stones at each side. Like most Pueblo altars, the cornmeal altar does not have a rectangular shape and its outlines are not well defined.

[778] [149] The lake, i.e., the medicine waterbowl filled with holy water, is in the center of the corn painting. The term, therefore, means the altar.

[150] There is some doubt about whether the fourth object is a bear paw or one of the smaller fetishes.

114 ●

[151] Later, Xa· yɛ· t'a·ª mentioned that the smoke from the P'o ku· ta·'s pipe reminded him of marijuana, "but marijuana makes you feel relaxed like walking on a cloud." The medicine man's trance after smoking his pipe is, however, not relaxed, but violent. [276]

[152] The same motion is used during the initiation of a medicine man in Isleta (Parsons, 1932, pp. 283, 315, 316, 355). This similarity may be due to Keresan influence through immigrants from Laguna.

[153] He has been helping the initiate to change his clothing in the Small Kiva. His absence lasts about fifteen minutes.

[154] His left leg is bent in a right angle, while the main body weight rests upon his sharply bent right leg. [516]

[155] The San Juan medicine men use old Keresan in their songs as a ceremonial language. [198]

[156] The trance begins to wear off.

[157] He had fasted eight days and is exhausted from the trance.

[158] Evidently this is done to purify the contents.

[159] This wish is a reminder of the times when the Pueblos were afraid of the invading and plundering Navajos. [648]

[160] Los Chicos refers to some of the land between U.S. highway 64 and the pueblo where a high, wild grass grows.

[161] Songs from the Navajo Mountain Chant were first recorded and translated by Washington Mathews. The quotations in this book are from Mathews, 1887, pp. 462-463 (in the revised edition, Schevill, pp. 102, 103).

[162] A distinction between the great curing ceremony in which all members of a curing society take part and a less formal service which is performed by one or two shamen has also been reported for Zuni by Bunzel, 1932b, p. 791. [171]

[163] The ču· gɛ 'i· may be either male or female.

[164] Parsons mentions this communal cleansing or exorcising ceremony of San Juan and defines its purpose as [783]

[183] cleansing the people, the houses, the fields, and the race tracks (1939, p. 912).

[165] Santa Clara has two curing societies. Healing cere- [754] monies may be performed by individual society members or by all the members of one society. A communal healing ceremony is held at specified times by the two societies together (Dozier, 1954, p. 267).

[166] Reed, 1949, p. 181.

[167] The relationship between the economic system of a culture and the basic character of its religion has first been pointed out by Underhill, 1948, pp. viii f. See also Underhill, 1957, pp. 131, 133.

[168] Clements, 1932, p. 243.

[169] Stewart, 1946.

[756] [170] Every adult male who is chosen may represent a Kachina, but only a man who has had a calling may become a shaman. Finding one or several of the sacred objects which are part of a medicine man's paraphernalia may be interpreted as a calling. But a man may also ask to join the Bears when he has been cured of an illness by the Bears, or when he is sick and feels that his sickness itself is the calling and that he must join the Bears to become cured.

[171] Keres is a linguistic term which refers to the language spoken in the pueblos of Santo Domingo, San Felipe, Cochiti, Santa Ana, Zia, Laguna, and Acoma.

[172] For a description of Keres curing ceremonies see Dumarest, 1919, pp. 151-161; Goldfrank, 1923, pp. 188-196; Goldfrank, 1927, pp. 63-65; Parsons, 1920, pp. 119-122; Stevenson, 1894, pp. 72, 97-101, 125, 127; White, 1932a, pp. 107-125; 1932b, pp. 42-50; 1935, pp. 89-132.

[173] For a detailed discussion of ceremonial glossalia, see May, 1956, pp. 75-96.

[174] Reed, 1943, p. 182.

[175] Medicine men societies are much stronger developed among the Keres than among any other Pueblo group. The Santo Domingo have four medicine men societies: Flint, Cikame, Boyakya, and Giant. Parsons (1939, p. 912) mentions

also three curing societies of San Juan: Flint and Fire, who organized the communal cleansing ceremonies, and a group of the Eagle people who present the Eagle Dance, and who "on the third night of its retreat welcomes anybody sick of anything who wants a drink from the medicine bowl on the altar." Presently, no curing societies are known in San Juan except one group of Bear people, and San Juan Indians consider Parsons' report as misinformation. [758]

[176] Reed, 1943, p. 280.

[177] Underhill, 1948, p. 37.

[178] Reed, 1943, p. 280.

[179] Parsons, 1939, p. 127.

[180] White, 1935, p. 127.

[181] Clements, 1932, p. 242.

[182] A four day retreat of the medicine men precedes the appearance of the Kachinas. When a moiety group prepares a Kachina dance, the "doctors in retreat" come to the kiva and sing for the kiva group members to dance. The medicine men consecrate the masks of the Kachina dancers by sprinkling them with sacred cornmeal. When eventually the Kachinas are ready to come out, the head of the Kachina society and one medicine man announce to the Cacique that the Kachina have come. During the Kachina dance in Santo Domingo, the medicine men wear masks and dance with the others (White, 1935, pp. 93-97). [756
616]

[183] White, 1935, p. 100.

[184] Among the Hopi-Tewa of the pueblo of Hano, whose Tewa ancestors had close contacts with the Keres before migrating about 1696 from the Gallisteo Basin in northern New Mexico to this first mesa in the Hopi country, there still exists a Kachina curing society, the shumakoli (Dozier, 1954, p. 348). The shumakoli ritual has been described by Stephen, 1936, pp. 818-823.

[185] For a discussion of possible Spanish influence on the Pueblo Indian witch concept, see Parsons, 1927.

[186] In using the term "active" trance, I am referring to a trance condition in which, with more or less success, an [787]

114 [187] attempt is made to attain a state of mental or physical power otherwise not at the disposal of the individual. Such a condition is very different from ordinary hypnotic sleep which might be relaxing without being weakening.

[187] Hastings, V, p. 122, defines possession as the "temporary embodiment of an influence or spirit alien to the subject."

[188] Charles, 1953, p. 122.

[189] La Farge, 1951, p. 51.

[190] Robbins, 1916, p. 42.

[191] Haeberlin, 1916, p.

[192] Spinden, 1933.

[193] Parsons, 1929a, p. 166.

3: Kroeber K-5 (1915-1916)1917 NT23 Zuni NT23
Tewa NT18
Hopi NT9
Keres NT12

TABLE 10 — (Concluded).

T H K Z 614 171

Generic		Hopi	Zuñi	Keres	Tewa
11.	a. Badger	Badger Moth-Butterfly	Badger[illegible]	Badger	Badger
	b. Bear[illegible]	Bear Spider Rope	Bear	Bear	Bear [illegible]
12.	a. Turquoise[illegible]	*	——	Turquoise	Turquoise
	b. Shell-Coral	*	——	Shell-Coral	Shell-Coral
Unplaced:		Bat	Yellow Wood	"Stone "Ivy" Salt Sage	Stone Grass

And a few others, mostly of doubtful authenticity and reported from single pueblos

T H K Z [illegible]

---

[1] It must be borne in mind that this table indicates only clans listed by some authority as actually occurring, under the names in question, in some pueblo of each group. The principal source is F. W. Hodge's valuable table of Pueblo Indian clans in *American Anthropologist*, old series, IX, [illegible], 1896. The Hopi synonyms have been used to identify clans that appear dissimilar in the several localities; but have not themselves been inserted, except when specifically mentioned in one of the Hopi sources. There are Deer and Panther clans in Keresan towns; at Hopi only Rattlesnake and Cactus are listed, with Deer and Panther as synonyms or sub-clans. All the identifications rest upon definite data of this sort, with the exception of a few rather obvious connections, which are mentioned in the notes as being conjectured.

[illegible] The word means "rattlesnake" in Hopi and other Shoshonean dialects.

[illegible] The town at Zuñi before [illegible] was called "[illegible]," in fact the modern town is still sometimes so referred to; and there is an old fraternity.

[illegible] The placing of the Buffalo, Gourd or Calabash, [illegible], Sky, and Moon clans in the table rests upon inductive guesses by the author, and not upon any known native classification.

[illegible] Represented by a Crane clan subdivision, [illegible], a [illegible] pumpkin.

[illegible] Mentioned by Cushing as extinct. I was told of the [illegible] of [illegible] people as a sub-clan of Corn.

[illegible] With subdivisions as to color which have been disregarded here.

[illegible] Fewkes and Mindeleff both give "sand," but comparative vocabularies show the word to have the more generic meaning of "earth" also.

[illegible] The [illegible] or highest priest, and the [illegible] or "speaker" for the sun, the two ranking officials in the [illegible] or god-fraternity of Zuñi, the basic tribal religious organization corresponding to the Hopi Katcina society, "which includes all males"

T H K Z [illegible]